

C I T Y O F L E E D S

R E P O R T
ON THE
Health & Sanitary
Administration
OF THE CITY
FOR THE YEAR 1947

BY

I. G. DAVIES, M.D., B.S., M.R.C.P., M.R.C.S., D.P.H.,
Medical Officer of Health and School Medical Officer.

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PUBLIC HEALTH COMMITTEE.

LORD MAYOR (Alderman George Brett, O.B.E., J.P.)

Chairman : Alderman D. BEEVERS.

Alderman J. WILKINSON, J.P.	Councillor W. WEBSTER, J.P.
Councillor SIR GEORGE MARTIN, K.B.E., J.P. (Deputy Chairman)	„ W. M. JONES
„ W. SPENCE	„ J. T. DICKINSON
„ DOROTHY MURPHY, J.P.	„ ELIZABETH MARY LISTER
„ H. M. G. MCKAY	„ D. KABERRY
„ WINIFRED SHUTT	„ P. H. HUTCHINSON
„ ALICE JOLLY	„ C. H. DRIVER
„ Z. P. FERNANDEZ, M.D.	„ R. B. BELL, J.P.
„ LIZZIE NAYLOR, J.P.	„ W. FOWLER
	„ MAY FISH

EX-OFFICIO MEMBERS.

Alderman the Rev. C. JENKINSON. Alderman J. CROYSDALE.

Representatives of Leeds Local Medical and Panel Committee invited to attend in an advisory capacity :—

Dr. J. H. E. MOORE and Mr. L. N. PYRAH (or a deputy in each case).

SUB-COMMITTEES

MATERNITY AND CHILD WELFARE.

Chairman : Councillor LIZZIE NAYLOR, J.P.

Alderman D. BEEVERS	Councillor Z. P. FERNANDEZ, M.D.
„ J. WILKINSON, J.P.	„ WINIFRED SHUTT
Councillor SIR GEORGE MARTIN, K.B.E., J.P.	„ W. WEBSTER, J.P.
„ H. M. G. MCKAY	„ ELIZABETH MARY LISTER
„ W. SPENCE	„ D. KABERRY
„ DOROTHY MURPHY, J.P.	

CO-OPTED MEMBERS.

Mrs. D. BEEVERS
Mrs. D. WARD

Mrs. AUSTYN BARRAN
Mrs. R. H. BLACKBURN

TUBERCULOSIS.

Chairman : Councillor W. SPENCE.

Alderman D. BEEVERS	Councillor WINIFRED SHUTT
„ J. WILKINSON, J.P.	„ J. T. DICKINSON
Councillor Sir GEORGE MARTIN, K.B.E., J.P.	„ LIZZIE NAYLOR, J.P.
„ DOROTHY MURPHY, J.P.	„ W. WEBSTER, J.P.
„ Z. P. FERNANDEZ, M.D.	„ ALICE JOLLY
„ H. M. G. McKAY	„ D. KABERRY
	„ P. H. HUTCHINSON

HOSPITALS.

Chairman : Alderman J. WILKINSON, J.P.

Alderman D. BEEVERS	Councillor W. M. JONES
Councillor Sir GEORGE MARTIN, K.B.E., J.P.	„ J. T. DICKINSON
„ WINIFRED SHUTT	„ ELIZABETH MARY LISTER
„ W. SPENCE	„ D. KABERRY
„ DOROTHY MURPHY, J.P.	„ P. H. HUTCHINSON
„ W. WEBSTER, J.P.	„ C. H. DRIVER
„ LIZZIE NAYLOR, J.P.	„ R. B. BELL, J.P.
„ Z. P. FERNANDEZ, M.D.	„ W. FOWLER
„ H. M. G. McKAY	„ MAY FISH
„ ALICE JOLLY	

CATTLE, FOOD AND DRUGS.

Chairman : Councillor ALICE JOLLY.

Alderman D. BEEVERS	Councillor LIZZIE NAYLOR, J.P.
„ J. WILKINSON, J.P.	„ H. M. G. MCKAY
Councillor W. SPENCE	„ W. WEBSTER, J.P.
„ DOROTHY MURPHY, J.P.	„ ELIZABETH MARY LISTER
„ Z. P. FERNANDEZ, M.D.	„ P. H. HUTCHINSON

STAFFING AND GENERAL PURPOSES.

Chairman : Alderman D. BEEVERS.

Alderman J. WILKINSON, J.P.	Councillor W. M. JONES
Councillor Sir GEORGE MARTIN, K.B.E., J.P.	„ Z. P. FERNANDEZ, M.D.
„ WINIFRED SHUTT	„ DOROTHY MURPHY, J.P.
„ H. M. G. McKAY	„ ALICE JOLLY
„ W. SPENCE	„ C. H. DRIVER
„ LIZZIE NAYLOR, J.P.	

PUBLIC HEALTH STAFF

Medical Officer of Health and Chief Tuberculosis Officer ..	J. JOHNSTONE JERVIS, M.D., Ch.B., D.P.H. (<i>to 31.7.47</i>).
Medical Officer of Health, Chief Tuberculosis Officer and School Medical Officer ..	I. G. DAVIES, M.D., B.S., M.R.C.P., M.R.C.S., D.P.H. (<i>from 25.7.47</i>).
Deputy Medical Officer of Health ..	J. F. WARIN, M.D., M.B., D.P.H.
Assistant Medical Officer of Health for Maternity and Child Welfare and Medical Officer of Infants' Hospital ..	CATHERINE MARGARET GRAY, M.B., Ch.B., D.P.H.
Deputy do. ..	MARION KNOWLES, M.B., Ch.B.
Assistant Medical Officers for Maternity and Child Welfare ..	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S.
	MARIA L. BELDON, M.B., Ch.B.
	EUGENIE CLARE ILLINGWORTH, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P.
	JESSIE I. ROSIE, M.B., Ch.B., D.P.H.
	M. N. M. PAULIN, M.B., Ch.B., B.A.O., D.P.H.
Assistant Medical Officer for Immunisation ..	G. R. BAXTER, M.D., B.Ch.D., D.P.H., D.T.M. & H. (<i>from 1.3.47</i>).
Chief Clinical Tuberculosis Officer ..	F. RIDEHALGH, M.A., M.B., B.Ch., M.R.C.S., L.R.C.P.
Deputy do. ..	J. ASPIN, M.A., M.D., D.M.R.D. (<i>from 1.7.47</i>).
Senior Assistant Clinical Tuberculosis Officer	D. A. HERD, L.R.C.P., L.R.C.S.
Assistant Clinical Tuberculosis Officer do. do. ..	W. GUTHRIE, M.B., Ch.B., L.M.S.S.A.
	H. GRUNWALD, M.D. (Vienna).
Assistant Medical Director, Mass Miniature Radiography	J. ASPIN, M.A., M.D., D.M.R.D. (<i>to 30.6.47</i>).
Medical Director, Mass Miniature Radiography	BRIGID AILEEN WALSH, M.B., Ch.B., B.A.O., D.P.H. (<i>from 17.11.47</i>).
Senior Dental Officer for Maternity and Child Welfare and Tuberculosis ..	H. HILTON, L.D.S.
Assistant Dental Officer for Maternity and Child Welfare and Tuberculosis ..	H. RAWNSLEY, L.D.S.U. (<i>from 12.5.47</i>).
Municipal General Hospitals Medical Director	W. MCINTOSH, M.B., Ch.B.
Inner Group of Hospitals— St. James's Hospital (North and South) Medical Superintendent ..	W. MCINTOSH, M.B., Ch.B.
Deputy Medical Superintendent ..	A. A. DRIVER, M.D., M.B., Ch.B., D.P.H. (<i>from 6.1.47</i>).

Outer Group of Hospitals—

St. Mary's Hospital,
 St. George's Hospital,
 Cookridge Hospital,
 Deputy Medical Superintendent.. J. W. AFFLECK, M.B., Ch.B.,
 F.R.F.P.S., D.P.M.

Medical Superintendents—

Seacroft Infectious Diseases Hospital—

Medical Superintendent ..	E. C. BENN, M.B., Ch.B., D.P.H.
Deputy do.	HESTER E. de C. WOODCOCK, M.B., Ch.B., D.P.H.

Killingbeck Sanatorium—

Medical Superintendent ..	W. SANTON GILMOUR, O.B.E., M.B., Ch.B.
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Gateforth Sanatorium—

Resident Medical Officer ..	A. C. MEEK, M.A., M.B., Ch.B., D.P.H.
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Venereal Diseases Officer R. LEES, M.D., F.R.C.P.

Assistant Medical Officers for Venereal
Diseases W. FOWLER, M.B., Ch.B.
J. R. G. BUCHANAN, M.B., Ch.B.

City Bacteriologist J. W. McLEOD, F.R.S., M.B., Ch.B.

City Analyst C. H. MANLEY, M.A., F.R.I.C.

Chief Sanitary Inspector J. GOODFELLOW, M.R.San.I.,
A.M.I.S.E.

Deputy do. N. HANCOCK, M.R.San.I.

Supervisor, Disinfecting and
Disinfestation Stations D. FERGUSON, (*to 17.11.47.*)

Supervisor, Ambulance Station F. E. J. LARGE.

Superintendent Health Visitor MATHILDE BURKE.

Supervisor of Midwives DOROTHY HUMPHREYS.

Superintendent of Works and
Buildings H. R. HUDSON, A.I.A.S., M.R.S.I.
(*to 30.6.47.*)

Administrative Assistant P. A. WOODCOCK.

Principal Clerks—

Finance A. R. BEST.

Statistics W. B. NOTTAGE.

Sanitary C. STEAD.

Infectious Diseases J. K. BEEVERS.

Food and Drugs S. TITTERINGTON.

Health Clinic F. H. WOOD.

Hospitals J. FOLKARD.

Secretarial W. B. LOFTHOUSE.

Special Inspectors, including Smoke, Lodging-houses, Food and Drugs, Dairies, Meat, Workshops, Diseases of Animals, and Housing ..	10
Laboratory Assistant	1
Sanitary Inspectors	31
Assistant Analysts	2
Vaccination Officer	1
Female Sanitary Inspectors	2
Health Visitors	31
Midwives	33
Scabies and Pediculosis Visitors, Nurses and Attendants	9
Sunlight, Orthopædic and Dental Nurses	3
Tuberculosis Visitors	6
Dispensers	8
Physiotherapists	3
Radiographers	3
Dark-Room Technicians	1
Clerical Staff and Almoners	90
Maintenance Staff (<i>to 30.6.47</i>)	252
Ambulance and Disinfecting Staff	20
Central Ambulance Station	53
Flushing Staff	4
Mortuary Service	2
Disinfestation	16
Rat Catchers	4

City of Leeds.

To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

The record of the year 1947 is, in the main, a good one with many solid achievements.

The statistics for the year are set out in detail in the body of the Report and I select only a few items of special interest for comment here.

The birth-rate increased from the already high figure of 20.5 in the previous year to 22.1. This is the highest figure since 1920 when it was 25.0 and compares with an average of 17.8 for the previous five years. High birth-rates are a usual feature of post-war years and it is a matter of conjecture how long the present high rates will continue.

Maternal mortality reached a new low record of 0.81 per 1,000 total births (live and still). The rate for last year was 1.18 and the average for the previous five years was 1.80. The number of deaths (9) is also a new low record. Against this must be set a rise in the infantile mortality rate to 51 as against 41 in 1946 and averages of 49 and 55 for the previous five- and ten-year periods respectively. A special investigation into the causes of death in young children is in progress and I hope that it may suggest profitable lines of action against this problem.

Deaths from tuberculosis (all forms) showed an increase from 288 in the previous year to 342. Against this may be set a small decrease in the notifications of tuberculosis (all forms).

The diphtheria figures for the year are most gratifying. Confirmed cases reached a new low record of 51 with only one death. Average figures for the previous five years were 315 cases and 11 deaths. The city's energetic immunisation campaign must be given full credit for this dramatic fall which must be a matter of particular satisfaction to the Committee and to the staffs of various sections of the Health Department who have energetically popularised diphtheria immunisation. There can be no question of resting on our laurels, for only by maintaining a high level of immunisation can the present low incidence be continued.

During the year a large-scale trial of whooping cough immunisation was commenced in co-operation with the Medical Research Council. The trial will continue for some two years and is designed to show what measure of protection can be given against this distressing and serious disease.

The year was marked by a high prevalence of acute anterior poliomyelitis. Full details are given in the body of the Report. Experience in other parts of the world shows that we must be prepared for an increased incidence of this disease for some time after the outbreak has subsided and that there is a danger of further outbreaks in subsequent years. In spite of much research we still lack effective means for the control of this disease.

In the field of planning and development 1947 was a year of transition, and many long-term projects had necessarily to stand over, pending the coming into force of the National Health Service Act and other new legislation. This applies in particular to the hospitals and to those special services destined to pass to the Regional Hospital Board. Proposals under Sections 22, 23, 24, 25, 26, 27, 28, 29 and 51 of the National Health Service Act were prepared and submitted to the Minister for approval.

Plans for alternative mortuary accommodation at St. James's Hospital were approved and at the end of the year work was well in hand, though certain articles of equipment had not been delivered. When complete the building will serve the dual purpose of hospital mortuary and public mortuary.

In October, 1947, the Bishop Cowgill Infants' Hospital was de-requisitioned and in November "The Hollies" was re-opened as a Sanatorium School.

Throughout the year the Sub-Health (Maternity and Child Welfare) Committee has pressed on with the provision of Day Nurseries in the face of many difficulties. Approval was obtained for an extension of the Burley Park Nursery and a hut purchased. Negotiations with the Ministry of Health were in progress at the end of the year for extensions to the Nurseries at Bramley, Rookwood, Meanwood, Armley, Low Road, Middleton, Cross Gates and York Road.

Work on the Hostel for the Spring Bank Residential Nursery was nearing completion at the end of the year.

I should like to refer very briefly to the work of my predecessor, Dr. J. Johnstone Jervis, who retired on 31st July, 1947. Dr. Jervis joined the city's Health Department in 1915 and held office as Medical Officer of Health from 1919. Though there are few fields of public health to which Dr. Jervis has not made outstanding contributions he will perhaps be best remembered for his work in building up a comprehensive and efficient hospital system. This monument to his long term of office will not soon be forgotten. The war years threw heavy burdens upon him, and his work within the Department and in Civil Defence brought him further laurels. Dr. Jervis was active in many spheres outside his own Department and his reputation is a national one. It was not to be expected that a man possessed of Dr. Jervis's energy would be content with an idle retirement. He continues to place his knowledge and ripe experience at the service of the country in many fields and it is a particular pleasure to note that he is still associated with the hospitals which were always so near to his heart.

I tender my best thanks to the members of my staff who so ably assisted me in taking over the duties of my office. My grateful thanks are also due to the Chairman and Members of the Health Committee for their energetic support and unfailing courtesy and helpfulness to me.

I am,

Ladies and Gentlemen,

Your obedient servant,

I. G. DAVIES.

*Public Health Department,
Leeds, 1.*

October, 1948.

CITY OF LEEDS.

VITAL AND MORTAL STATISTICS 1917 - 1947

Year	Population	INFANT MORTALITY				STILL-BIRTHS			MATERNAL MORTALITY			DIARRHEA AND ENTERITIS		TUBERCULOSIS (All Forms)		CANCER		DEATHS FROM RESPIRATORY DISEASES (inc. Influenza but excl. Pul. Tub.)		DIPHTHERIA		SCARLET FEVER		TYPHOID FEVER		MEASLES		WHOOPING COUGH				
		Births	Birth-Rate	Deaths	Death-Rate	Deaths — 1 year	Rate per 1,000 live births	Neo-Natal Mortality Rate	No.	Rate per 1,000 population	Deaths from Sepsis	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 2 years	Death- Rate per 1,000 births	Deaths	Death- Rate	Deaths	Death- Rate	Cases	Deaths	No. of persons immunised	Cases	Deaths	Cases	Deaths	Cases	Deaths			
1917	438,254	7,566	17.3	7,052	16.1	1,023	135	42.0	..	..	5	18	23	3.04	171	22.6	954	2.18	535	1.22	1,367	549	60	..	543	7	37	7	4,772	277	..	69
8	427,589	7,392	17.3	8,529	19.9	984	133	42.7	..	..	6	19	25	3.38	146	19.8	962	2.25	500	1.17	2,910	542	47	..	570	19	42	5	6,641	417	..	130
9	430,834	7,564	17.6	6,992	16.2	899	119	49.3	..	..	6	29	35	4.62	140	18.5	719	1.67	575	1.33	2,040	811	43	..	1,340	23	33	8	2,438	48	..	66
1920	448,913	11,229	25.0	6,591	14.7	1,232	110	46.3	..	..	29	28	57	5.07	140	12.5	698	1.56	492	1.10	1,513	885	64	..	1,363	17	29	4	5,459	148	..	100
1	463,500	10,144	21.8	6,285	13.5	997	98	41.3	..	..	8	30	38	3.75	184	18.1	641	1.37	554	1.19	1,360	665	38	..	1,526	14	24	2	209	5	..	72
2	466,700	9,253	19.8	6,479	13.9	935	101	43.3	..	..	14	18	32	3.46	92	9.9	653	1.40	595	1.27	1,357	470	28	..	2,722	33	14	7	9,932	152	..	115
3	469,900	8,684	18.5	5,986	12.7	773	89	41.8	..	..	10	35	45	5.18	118	13.6	637	1.36	574	1.22	1,179	368	20	..	2,134	31	9	1	4,683	50	..	32
4	471,600	8,558	18.1	6,747	14.3	921	108	38.7	..	..	9	24	33	3.86	103	12.0	657	1.40	639	1.35	1,777	289	27	..	1,256	20	25	6	6,654	46	..	87
5	472,900	8,180	17.3	6,037	12.8	748	91	37.8	..	..	24	21	45	5.50	149	18.2	599	1.27	606	1.28	1,262	422	39	..	1,166	15	9	3	5,100	39	..	47
6	473,400	8,065	17.0	6,062	12.8	748	93	38.7	..	..	14	27	41	5.08	147	18.2	585	1.24	657	1.39	1,099	374	26	..	756	5	9	1	7,076	19	..	119
7	477,600	7,790	16.3	6,198	13.0	629	81	35.2	..	..	14	24	38	4.88	88	11.3	558	1.17	649	1.36	1,070	439	28	..	773	6	14	2	8,569	117	..	44
8	474,800	7,665	16.1	6,133	12.9	606	79	37.3	..	..	14	22	36	4.70	105	13.7	542	1.14	698	1.47	976	634	21	94	3,515	18	6	1	3,638	21	..	36
9	478,500	7,426	15.5	7,898	16.5	722	97	42.3	1,369	0.77	10	23	33	14.23	86	11.6	621	1.30	684	1.43	2,037	536	26	107	3,473	29	14	3	9,486	102	..	107
10	478,500	7,568	15.8	5,930	12.4	512	68	38.5	332	0.69	10	22	32	4.05	34	4.5	533	1.11	728	1.52	798	994	54	179	2,383	23	4	2	913	2	..	32
11	486,400	7,219	14.8	6,506	13.4	552	76	32.3	367	0.75	17	22	39	5.14	68	9.4	527	1.08	740	1.52	1,047	995	86	318	1,467	12	10	2	10,955	56	..	43
12	484,900	7,004	14.4	6,469	13.3	617	88	36.4	334	0.69	8	13	21	2.86	106	15.1	493	1.02	760	1.57	966	889	48	1,524	931	8	9	..	3,540	52	..	41
13	485,000	6,643	13.7	6,574	13.6	537	81	36.6	333	0.69	15	12	27	3.87	104	15.7	499	1.03	706	1.46	1,148	1,057	88	726	1,906	9	10	1	3,973	22	..	28
14	486,250	7,190	14.8	6,291	12.9	513	71	35.0	320	0.66	15	14	29	3.86	76	10.6	462	0.95	801	1.65	711	2,231	156	2,452	2,711	16	8	1	10,576	90	..	25
15	487,200	7,211	14.8	6,432	13.2	463	64	33.1	334	0.69	8	16	24	3.18	62	8.6	435	0.89	803	1.65	772	1,335	60	30,062	2,082	5	5	..	1,341	4	..	48
16	489,800	7,340	15.0	6,666	13.6	476	65	30.0	320	0.65	10	14	24	3.13	71	9.7	408	0.83	843	1.72	803	799	36	1,937	1,868	12	4	..	8,744	49	..	28
17	491,860	7,279	14.8	6,573	13.4	491	67	33.2	313	0.64	6	11	17	2.24	65	8.9	406	0.83	777	1.58	959	941	44	1,135	2,234	5	16	3	2,373	9	..	19
18	(a) 497,000	7,614	15.4	6,255	12.7	490	64	33.1	329	0.67	2	12	14	1.76	94	12.3	397	0.80	879	1.78	625	948	33	II,172	1,717	8	3	..	6,797	18	..	13
19	(b) 488,000	7,079	14.2	6,535	13.4	401	57	30.2	307	0.62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	427	20	894	960	2	I2	I	1,673	2	..	132
20	465,700																															

SUMMARY

1947

LATITUDE 53°48' North. LONGITUDE 1°32' West.

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY	38,296·5 Acres.
CIVILIAN POPULATION (Registrar General's Estimate)	492,140
ESTIMATED NUMBER OF HOUSES	152,708
RATEABLE VALUE	£3,819,135
SUM REPRESENTED BY A PENNY RATE	£15,792

Average
1947. 1937-46.

BIRTH RATE (births per 1,000 living)	22·1	16·2
MARRIAGE RATE (persons married per 1,000 living) ..	21·1	19·9
DEATH RATE (deaths per 1,000 living)	13·8	13·7
NATURAL INCREASE OF POPULATION	4,082	1,217
(Excess of births over deaths in the year)		
INFANT MORTALITY RATE	51	55
(Deaths under 1 year per 1,000 births)		
DEATH RATE from Pneumonia and Bronchitis.. ..	1·62	1·28
" " Cancer..	1·92	1·86
" " Diarrhoea and Enteritis (under 2 years) per 1,000 births	II·22	7·66

		Cases	Case-rate	Deaths	Death rate
SCARLET FEVER	1,372	2·79	1	0·00	
DIPHTHERIA	51	0·10	1	0·00	
TYPHOID FEVER	5	0·01	1	0·00	
MEASLES	6,791	13·80	19	0·04	
WHOOPING COUGH	1,311	2·66	19	0·04	
PULMONARY TUBERCULOSIS	518	1·05	305	0·62	
OTHER FORMS OF TUBERCULOSIS	133	0·27	37	0·08	

Natural and Social Conditions.

Area.—38,296·5 acres.

Population.—The Registrar General's estimate of the civilian population of the city at the mid-year of 1947 was 492,140.

Dwelling-houses.—The total number of occupied dwelling-houses in the city at December, 1947, was 151,797.

Rateable Value.—The rateable value of the city in 1947 was £3,819,135 and the sum represented by a penny rate was £15,792. The corresponding figures for 1946 were £3,949,120 and £15,608.

VITAL AND MORTAL STATISTICS.

Marriages.—The number of marriages which took place in the city during the year was 5,195, corresponding to a marriage rate of 21·1 as compared with 4,979 and a rate of 20·7 for the previous year and an average of 4,415 and 19·2 for the previous five years.

The provisional marriage rate for England and Wales for 1947 was 18·5 as compared with 17·9 for the previous year.

Births.—The nett number of births credited to the city during the year was 10,875 as compared with 9,886 for the previous year, an increase of 989. The birth-rate was 22·1 per 1,000 of the civilian population, as compared with 20·5 for the previous year and an average of 17·8 for the previous five years.

The birth-rate was the highest since 1920 when it was 25·0.

The birth-rate for the city was lower than the rate of the 126 large towns, which was 23·3 per 1,000 of the civilian population, but higher than that of England and Wales taken as a whole, which was 20·5 per 1,000 of the total population.

Excess of Births over Deaths.—The excess of births over deaths, or the "natural increase of the population," was 4,082 as compared with 3,272 in 1946 and an average of 1,217 for the previous ten years. This is the largest natural increase recorded since 1921, when the figure was 3,859.

Illegitimate Births.—Of the 10,875 (nett) births registered, 10,176 or 93·6 per cent. were legitimate and 699 or 6·4 per cent. were illegitimate. The comparative figures for the previous year were 9,122 or 92·3 per cent. legitimate and 764 or 7·7 per cent. illegitimate.

ILLEGITIMATE BIRTHS.

Year.	Illegitimate births.	Percentage of nett births registered.	Rate per 1,000 estimated population.
1914 ..	564	5·3%	1·23
1915 ..	543	5·5%	1·18
1916 ..	553	5·9%	1·24
1917 ..	576	7·6%	1·31
1918 ..	528	7·1%	1·23
1919 ..	567	7·5%	1·32
1920 ..	631	5·6%	1·41
1921 ..	565	5·6%	1·21
1922 ..	511	5·5%	1·09
1923 ..	438	5·0%	0·93
1924 ..	423	4·9%	0·90
1925 ..	422	5·2%	0·89
1926 ..	434	5·4%	0·92
1927 ..	371	4·8%	0·78
1928 ..	390	5·1%	0·82
1929 ..	410	5·5%	0·86
1930 ..	374	4·9%	0·78
1931 ..	358	5·0%	0·74
1932 ..	370	5·3%	0·76
1933 ..	335	5·0%	0·69
1934 ..	381	5·3%	0·78
1935 ..	360	5·0%	0·74
1936 ..	385	5·2%	0·79
1937 ..	400	5·5%	0·81
1938 ..	429	5·6%	0·87
1939 ..	387	5·5%	0·78
1940 ..	402	5·8%	0·86
1941 ..	443	6·6%	0·94
1942 ..	460	6·4%	0·99
1943 ..	583	7·7%	1·28
1944 ..	683	8·0%	1·51
1945 ..	841	10·8%	1·86
1946 ..	764	7·7%	1·54
1947 ..	699	6·4%	1·42

Stillbirths.—The nett number of stillbirths for the year was 306 or 2·7 per cent. of the total births registered. The corresponding figures for the previous year were 299 and 2·9 per cent. Calculated per thousand of the population the rate for stillbirths was 0·62 as compared with 0·62 for the previous year. The rate for England and Wales was 0·50. Of the 306 nett stillbirths 280 or 91·5 per cent. were legitimate and 26 or 8·5 per cent. were illegitimate.

Year.	No. of stillbirths registered.*	Per cent. of total births.	Rate per 1,000 population.
1936 ..	320 (21)	4·2	0·65
1937 ..	313 (17)	4·1	0·64
1938 ..	329 (19)	4·1	0·67
1939 ..	307 (19)	4·2	0·62
1940 ..	282 (27)	3·9	0·61
1941 ..	259 (29)	3·9	0·55
1942 ..	278 (32)	3·7	0·60
1943 ..	250 (22)	3·2	0·55
1944 ..	262 (23)	3·0	0·58
1945 ..	248 (38)	3·1	0·55
1946 ..	299 (29)	2·9	0·62
1947 ..	306 (26)	2·7	0·62

* Illegitimate Stillbirths in brackets.

Deaths.—The nett number of civilian deaths was 6,793 as compared with 6,614 for the previous year, an increase of 179. The corresponding death-rate was 13·8 as compared with 13·7 for the previous year and an average of 13·7 for the previous five years.

The death-rate for England and Wales was 12·0 and that of the 126 large towns, 13·0.

Causes of Death.—The principal causes of death were, in order of numerical importance, organic heart disease, cancer, cerebral haemorrhage, bronchitis, arterio sclerosis, pulmonary tuberculosis and pneumonia which together accounted for 5,036 deaths or 74·1 per cent. of the total deaths. Last year (1946) this group of diseases was responsible for 5,011 or 75·8 per cent. of the total deaths.

Deaths in Age Groups.—The table on page 7 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups 0-1, 1-2 and 2-5 was 644 or 9·5 per cent. of the total deaths, as compared with 460 or 7·0 per cent. for the previous year and an average of 480 or 7·6 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 1,270 or 18·7 per cent. as compared with 1,066 or 16·1 per cent. in the previous year. In the remaining age groups 45-65 and 65+ the deaths numbered 5,523 or 81·3 per cent. as compared with 5,548 and 83·9 per cent. for the previous year.

Infant Mortality Rate.—The number of deaths of children under one year was 552 or 8·1 per cent. of the total deaths. The infant mortality rate corresponding was 51 or 10 more than in the previous year (41) and 2 more than the average for the previous five years (49).

This subject is dealt with in greater detail on page 104.

Cremations.—Out of a total of 6,793 Leeds deaths during the year 1947, the number of bodies disposed of by cremation was 1,172 or 17·3 per cent. as compared with 1,020 and 15·4 per cent. for the previous year. Of this number 1,046 were cremated at Lawnswood and the remainder, 126, at Cottingley Hall. The total number of cremations represents an increase of 152 on the figure for the previous year and an increase of 538 on the average number of cremations for the previous five years.

PRINCIPAL CAUSES OF DEATH.

Death rate.	Diseases.	No. of deaths in 1947 (nett).	+ Increase or - decrease compared with 1946.
0·00	1. Typhoid and Paratyphoid Fevers	1	+ -
0·01	2. Cerebro-spinal Fever	6	- 1
0·00	3. Scarlet Fever	1	+ 1
0·04	4. Whooping Cough	19	+ 6
0·00	5. Diphtheria	1	- 5
0·62	6. Tuberculosis of Respiratory system	305	+ 44
0·08	7. Other forms of tuberculosis	37	+ 10
0·09	8. Syphilitic Disease	45	+ 11
0·09	9. Influenza	42	- 7
0·04	10. Measles	19	+ 18
0·01	11. Ac. Poliomyelitis and polioencephalitis	5	+ 5
0·02	12. Ac. Infectious Encephalitis	8	+ 7
0·06	13M. Cancer of buccal cavity and oesophagus	28	- 11
0·12	13F. Cancer of Uterus	59	- 10
0·30	14. Cancer of stomach and duodenum	147	- 10
0·20	15. Cancer of Breast	98	+ 17
1·25	16. Cancer of all other sites	615	+ 1
0·07	17. Diabetes	34	- 13
1·51	18. Intra-cranial vascular lesions..	744	+ 6
3·65	19. Heart disease	1,794	- 242
1·10	20. Other diseases of circulatory system	542	+ 67
1·09	21. Bronchitis	534	+ 236
0·53	22. Pneumonia	260	- 58
0·10	23. Other respiratory diseases	51	- 3
0·12	24. Ulceration of the stomach or duodenum	61	+ 3
0·25	25. Diarrhoea (under 2 years)	122	+ 69
0·05	26. Appendicitis	27	+ 3
0·28	27. Other digestive diseases	138	- 32
0·25	28. Nephritis	125	- 20
0·00	29. Puerperal and post-abortive sepsis	1	- 3
0·02	30. Other maternal causes	8	+ -
0·24	31. Premature birth	118	+ 13
0·28	32. Congenital malformations, birth injury, infantile disease	137	+ 34
0·11	33. Suicide	53	- 7
0·07	34. Road traffic accidents	32	- 8
0·35	35. Other violent causes	170	+ 32
0·82	36. All other causes	406	+ 26
13·8	Totals	6,793	+179

CAUSES OF, AND AGES AT DEATH DURING THE CALENDAR YEAR, 1947.

CAUSE OF DEATH	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.								Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District
	ALL AGES.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	
1. Typhoid and Paratyphoid Fevers	1	..	..	..	..	1	..	..	1
2. Cerebro-Spinal Fever	6	4	..	..	..	..	..	..	2 7
3. Scarlet Fever	1	..	..	..	1	..	..	..	1
4. Whooping Cough	19	9	6	4	..	..	..	..	15
5. Diphtheria	1	..	..	..	1	..	..	..	1
6. Tuberculosis of Respiratory System	305	..	..	1	1	39	122	114	28 105
7. Other Forms of Tuberculosis	37	3	5	9	3	2	3	9	3 54
8. Syphilitic Disease	45	1	..	..	..	1	6	21	16 22
9. Influenza	42	1	1	..	..	..	1	14	25 1
10. Measles	19	6	6	6	1	..	..	..	5
11. Acute Poliomyelitis and Polioencephalitis	5	..	..	..	2	3	..	..	8
12. Acute Infectious Encephalitis	8	..	..	..	..	..	2	3	3 6
13M. Cancer of Buccal Cavity and Oesophagus (Males) ..	28	..	..	..	..	..	..	7	21 11
13F. Cancer of Uterus (Females) ..	59	..	..	..	..	..	5	33	21 25
14. Cancer of Stomach and Duodenum	147	..	..	..	..	..	6	55	86 76
15. Cancer of Breast	98	..	..	..	..	..	8	47	43 31
16. Cancer of all other sites ..	615	..	1	3	1	6	39	264	301 348
17. Diabetes	34	..	..	..	..	..	5	6	23 24
18. Intra-cranial vascular lesions	744	3	..	..	1	..	16	162	562 206
19. Heart Disease	1,794	..	..	1	..	4	84	413	1,292 374
20. Other Diseases of Circulatory System	542	..	..	..	..	..	8	49	485 453
21. Bronchitis	534	10	..	2	2	1	15	163	341 104
22. Pneumonia	260	90	5	11	2	..	12	31	109 144
23. Other Respiratory Diseases ..	51	2	1	..	..	..	8	13	27 17
24. Ulcer of Stomach and Duodenum	61	..	..	..	..	..	6	37	18 62
25. Diarrhoea under two years ..	122	121	1	..	..	..	..	..	.. 96
26. Appendicitis	27	..	..	1	8	2	6	5	5 29
27. Other Digestive Diseases ..	138	7	2	1	2	1	20	36	69 143
28. Nephritis	125	..	..	..	1	3	11	48	62 62
29. Puerperal and Post-abortive Sepsis	1	..	..	..	..	..	1	..	.. 3
30. Other Maternal Causes	8	..	..	..	..	2	6	..	.. 8
31. Premature Birth	118	118	..	..	..	..	..	..	.. 129
32. Congenital Malformation, birth injury, infantile disease	137	125	..	2	..	4	4	2	.. 144
33. Suicide	53	..	..	..	..	2	14	27	10 7
34. Road Traffic Accidents ..	32	..	1	..	6	2	7	8	.. 32
35. Other Violent Causes ..	170	27	2	7	9	5	23	21	76 108
36. All Other Causes	406	25	2	11	10	7	52	89	210 289
Totals	6,793	552	83	59	51	85	490	1,677	3,846 3,151

DEATHS IN AGE GROUPS (NETT), 1937-1947.

Together with the percentage of the total deaths, represented by each group
(in italics).

Year.	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
1937	491 <i>7·5%</i>	72 <i>1·1%</i>	73 <i>1·1%</i>	102 <i>1·5%</i>	190 <i>2·9%</i>	622 <i>9·5%</i>	1,926 <i>29·3%</i>	3,097 <i>47·1%</i>	6,573
1938	490 <i>7·8%</i>	64 <i>1·0%</i>	81 <i>1·3%</i>	100 <i>1·6%</i>	171 <i>2·7%</i>	584 <i>9·4%</i>	1,802 <i>28·8%</i>	2,963 <i>47·4%</i>	6,255
1939	401 <i>6·1%</i>	54 <i>0·8%</i>	61 <i>0·9%</i>	74 <i>1·1%</i>	155 <i>2·4%</i>	580 <i>8·9%</i>	1,860 <i>28·5%</i>	3,350 <i>51·3%</i>	6,535
1940	395 <i>5·7%</i>	62 <i>0·9%</i>	60 <i>0·9%</i>	73 <i>1·1%</i>	168 <i>2·4%</i>	646 <i>9·3%</i>	2,000 <i>28·9%</i>	3,514 <i>50·8%</i>	6,918
1941	407 <i>6·3%</i>	62 <i>1·0%</i>	79 <i>1·2%</i>	92 <i>1·4%</i>	151 <i>2·3%</i>	599 <i>9·3%</i>	1,834 <i>28·4%</i>	3,232 <i>50·1%</i>	6,456
1942	369 <i>6·1%</i>	45 <i>0·7%</i>	59 <i>1·0%</i>	86 <i>1·4%</i>	118 <i>1·9%</i>	531 <i>8·7%</i>	1,703 <i>28·0%</i>	3,179 <i>52·2%</i>	6,090
1943	356 <i>5·6%</i>	42 <i>0·7%</i>	63 <i>1·0%</i>	96 <i>1·5%</i>	144 <i>2·3%</i>	563 <i>8·8%</i>	1,657 <i>26·1%</i>	3,437 <i>54·0%</i>	6,358
1944	429 <i>7·0%</i>	34 <i>0·6%</i>	37 <i>0·6%</i>	86 <i>1·4%</i>	114 <i>1·9%</i>	500 <i>8·2%</i>	1,663 <i>27·1%</i>	3,261 <i>53·2%</i>	6,124
1945	438 <i>6·8%</i>	33 <i>0·5%</i>	37 <i>0·6%</i>	67 <i>1·1%</i>	104 <i>1·6%</i>	481 <i>7·5%</i>	1,752 <i>27·3%</i>	3,498 <i>54·6%</i>	6,410
1946	401 <i>6·1%</i>	29 <i>0·4%</i>	30 <i>0·5%</i>	49 <i>0·7%</i>	99 <i>1·5%</i>	458 <i>6·9%</i>	1,775 <i>26·8%</i>	3,773 <i>57·0%</i>	6,614
1947	552 <i>8·1%</i>	33 <i>0·5%</i>	59 <i>0·9%</i>	51 <i>0·8%</i>	85 <i>1·3%</i>	490 <i>7·2%</i>	1,667 <i>24·7%</i>	3,846 <i>56·6%</i>	6,793

Infectious and Other Diseases

BY

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The outstanding event of the year was the Poliomyelitis epidemic which affected Leeds in common with most areas in England and Wales. There were 53 accepted cases in the city which is more than double the previous highest figure. The epidemic commenced in June and continued until October, the peak being reached in September. Half of the cases occurred in children of school age and more males were affected than females. The wide distribution of cases in the city and the absence of evidence of direct case to case spread suggests that infection was very widespread in the community but that only a very small proportion of those infected showed symptoms of the disease. Full details of the outbreak are given later in the report. Despite the most careful investigations the problem of the control of this disease is still unsolved.

There was a further substantial reduction in the incidence of diphtheria to the record low level of 51 cases. There was only one death, that of a child who had not been immunised.

A special clinic was started to meet the need of persons going abroad and requiring inoculations against such diseases as typhoid fever, typhus fever, tetanus and cholera.

There was a slight increase in the number of cases of scarlet fever but clinically the disease was extremely mild and it was found possible to nurse the majority of cases at home. There was one death; the first to be recorded from this disease during the last three years.

It was an epidemic year for measles but the number of cases was well below the total recorded in other recent years. There were, however, 19 deaths, mostly in very young children, a reminder of the seriousness of this disease in infancy. In an endeavour to lessen this risk "measles serum" was made available to the medical profession for prevention or attenuation.

There was a decrease in the number of cases of whooping cough, but 19 deaths have to be recorded. Of all the notifiable diseases whooping cough now has the highest death-rate in young children and in an attempt to find an effective vaccine a "field trial" organised in conjunction with the Medical Research Council was commenced during the year. A careful follow-up for at least two years will be necessary before the value of the vaccine can be assessed, but the results so far are hopeful.

There has been a big increase in the number of deaths of children under the age of two from diarrhoea and vomiting. The reason for this is not obvious and an investigation is in progress to find a means of reducing the ravages of this disease.

There was a marked decrease in the number of cases of dysentery during the year. Leeds was fortunate in escaping the severe type of neo-natal diarrhoea which attacked a number of maternity homes in other parts of the country, but a mild outbreak did occur in the maternity section of one of the hospitals in the city. There were no deaths. Earlier in the year the same maternity unit experienced a sharp outbreak of pemphigus neonatorum. At first the cases were very mild but later a number developed severe enteritis and six babies died.

During the last month of the year and the first two months of 1948 five cases of anthrax were reported in workers handling goat skins at a tannery in the city. All the cases were diagnosed at an early stage and recovered. A fuller report will be given next year.

Scabies, which has been steadily decreasing in incidence during recent years, again decreased sharply. There was also a further reduction in the number of cases of pediculosis capitis which came to the notice of the Department. The facilities for the treatment of these diseases at Sweet Street and St. James's Hospital are very poor. Good results are being achieved in the face of difficulties.

The acute nursing shortage at Seacroft Hospital has limited admissions and a few cases have had to be nursed at home when removal to hospital would have been advisable. The shortage of cubicle accommodation was especially apparent and it is regrettable that the recently adapted cubicle ward could not be used owing to shortage of nurses.

Full terminal house disinfection, previously practised after most of the notifiable infectious diseases, was, during this year restricted to such infections as smallpox, pulmonary tuberculosis, typhoid, dysentery and poliomyelitis. After diphtheria, scarlet fever, measles and whooping cough, a "spring clean" combined with maximum ventilation and washing of bed linen is all that is now considered necessary. The routine disinfection of library books has been discontinued. After smallpox the books will be destroyed.

Smallpox.—No case of this disease occurred in the city during the year. Six contacts from other areas were kept under surveillance during the quarantine period. In addition, seven persons who arrived from areas abroad where smallpox was prevalent were kept under observation. None of them developed the disease. Six doubtful cases were referred to the Department for a second opinion. Two of these proved to be chickenpox, two bronchitis and two urticarial rashes.

Vaccination.—During 1946, the last year for which statistics are available, 6,217 children or 60·6 per cent. of the total births, were successfully vaccinated, a figure which is appreciably higher than the rate for the country as a whole.

Comparative figures for the ten preceding years are as follows:—

1945	..	..	..	..	..	56·2%
1944	..	..	..	..	..	54·8%
1943	..	..	..	..	..	54·9%
1942	..	..	..	..	..	54·4%
1941	..	..	..	..	..	50·6%
1940	..	..	..	..	..	45·1%
1939	..	..	..	..	..	41·5%
1938	..	..	..	..	..	45·6%
1937	..	..	..	..	..	44·8%
1936	..	..	..	..	..	46·0%

The steady rise since 1939 is of interest in view of the repeal of the Vaccination Acts which will take place on July 5th, 1948.

Typhus.—No case of this disease occurred in the city during the year. One person who arrived in the city from an area abroad where typhus was prevalent was kept under observation.

Cholera.—Four persons who arrived in the city from the Middle East where there was a severe cholera outbreak towards the end of the year were kept under observation. None of them developed the disease.

Diphtheria.—Accepted cases during the year numbered 51, all of which were treated in hospital, compared with 132 (97·0 per cent. treated in hospital) a year ago. The case-rate of 0·10 was the lowest on record. There was one death representing a case mortality rate of 2·0 per cent. as compared with six deaths (4·5 per cent) last year. This death was in an unimmunised child. The number of cases and deaths are the lowest ever to be recorded in the city and the credit for this must be given to the Immunisation Scheme. The measure of success is shown clearly by comparing this year's figures of 51 cases and one death with 2,231 cases and 156 deaths in 1934. For the first time since Seacroft Hospital was opened as an Infectious Diseases Hospital there was a short period when there were no cases of diphtheria in the wards. It is becoming difficult to find typical cases of diphtheria to show to students and the time is approaching when doctors may qualify without having seen a case. No case of laryngeal diphtheria occurred during the year. The present high level of immunisation must be maintained and even increased in order to keep diphtheria at bay. There must be no easing up in the immunisation campaign.

Year.	Cases Notified.	Case-rate.	Deaths.	Death-rate.
1928	634	1·34	21	0·08
1929	536	1·12	26	0·09
1930	994	2·08	54	0·09
1931	995	2·05	86	0·07
1932	889	1·83	48	0·06
1933	1,057	2·18	88	0·07
1934	2,231	4·59	156	0·10
1935	1,335	2·74	60	0·09
1936	799	1·63	36	0·08
1937	941	1·91	44	0·07
1938	948	1·92	33	0·07
1939	427	0·88	20	0·05
1940	301	0·65	11	0·06
1941	576	1·22	22	0·07
1942	707	1·53	25	0·05
1943	334	0·74	11	0·03
1944	254	0·56	9	0·02
1945	149	0·33	2	0·00
1946	132	0·27	6	0·01
1947	51	0·10	1	0·00

Diphtheria Immunisation.—This Section is staffed by a whole-time Medical Officer and a whole-time Health Visitor assisted by part-time doctors and nurses. The use of part-timers has proved a very happy arrangement, those participating have worked enthusiastically and there has been no "nursing shortage." An advantage is that the number of sessions given by the part-timers can be regulated according to the needs of the service; for instance, they are called upon more often when the schools are open and when the mobile clinic is in action.

During the year, 8,730 children under 15 years of age were immunised against diphtheria as compared with 9,739 last year. Of this total, 8,176 immunisations were done by medical officers of this Department and the remaining 554 by private practitioners to whom material was supplied, free of charge, by the Department. In addition, 8,114 "refresher" doses were given to children under 15 years of age as compared with 13,311 last year. Ideally, immunisation should be completed before the child's first birthday and a "refresher" dose given two years later or soon after the child first attends school.

On 31st December, 1947, it was estimated that 57·6 per cent. of children under five years of age (75·2 per cent. between the ages of one and five) and 90·1 per cent. between the ages of five and fifteen years in the city had been immunised against diphtheria. It is calculated that of children of all ages up to fifteen years 77·7 per cent. have been immunised.

The mobile clinic was again used during the summer months for the benefit of those living in outlying districts or where parents were unable to take their children to the regular clinics or defaulted before immunisation was complete. It again proved highly successful and 1,290 children were immunised by this service. Many, if not most, of these would not have received the protection of immunisation had there been no mobile unit to bring it to them. Loud-speaker equipment was fitted to the immunisation van during the year and proved most useful in advertising the presence of the unit in a locality.

The table on page 13 illustrates the progress of the immunisation scheme since its inception.

Diphtheria in the Inoculated.—Of the 133,079 persons immunised since 1928, 17 developed clinical diphtheria of a mild type during the year. All recovered.

Diphtheria Immunisation.

Illustrating the progress of the Immunisation Scheme since its inception.
Number of Persons in Age Groups, having had Full Course of Injections.

Age at date of Inoculation	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	Total.	
Under 1 year ..	15	35	30	34	79	25	56	383	102	68	210	38	75	24	..	..	..	..	..	788	Total
1-2 years ..	33	33	31	45	156	28	163	820	200	245	820	215	411	941	3,980	3,990	4,412	5,110	5,137	5,304	under 5 years	
2-3 ..	17	16	7	30	169	46	171	937	114	177	788	116	173	814	2,262	1,024	469	240	777	418	at end of 1947	
3-4 ..	18	9	13	37	161	66	184	1,188	117	92	1,908	96	121	943	2,053	1,063	463	220	557	327	23,358	
4-5 ..	11	10	6	28	152	75	204	1,638	114	79	1,241	64	62	866	1,940	1,043	381	257	483	288		
5-6 ..	2	2	6	25	209	148	282	2,337	163	72	1,752	46	30	1,568	1,486	1,667	451	359	556	386		
6-7 ..	2	1	6	17	248	183	236	2,523	86	53	1,818	12	10	1,450	940	1,622	302	283	467	296	Total	
7-8	7	26	106	58	184	2,546	54	27	1,239	7	6	1,174	676	1,482	197	185	392	225	5-10 years
8-9	11	22	54	18	186	2,606	30	7	571	13	6	979	466	1,357	164	188	276	153	29,521
9-10	11	11	45	18	172	2,647	27	9	396	6	3	926	325	1,271	167	142	259	142	
10-11	15	9	53	16	182	2,955	28	14	817	19	4	892	252	1,197	130	162	250	100	Total
11-12	5	10	30	8	160	2,846	30	7	287	17	4	921	205	1,089	109	128	249	113	
12-13	4	6	27	10	122	2,930	30	7	212	19	5	839	193	1,193	96	109	185	97	10-15 years
13-14	8	4	10	8	89	2,673	54	6	154	32	7	704	175	1,035	78	79	138	100	20,583
14-15	7	4	1	4	53	475	83	..	17	20	..	74	148	382	8	29	34	13	Total
16 years and over ..	..	..	..	8	7	7	2	107	408	696	144	25	174	37	65	..	55	79	83	43	15 years & over
Age not known	1	2	6	3	17	14	51	151	9	129	317	..	213	34	..	..	11	..	..	..	Total
Totals ..	94	107	179	818	1,524	726	2,452	30,062	1,987	1,135	11,172	894	1,167	13,298	15,101	19,415	7,483	7,510	9,822	8,773	133,079	

Special Inoculations.—During the year 277 persons going abroad and requiring inoculations against one or more of the diseases shown below, attended the Central Immunisation Clinic in Park Square and received inoculations as follows :—

Typhoid Fever	..	..	..	136
Typhus Fever	..	..	..	61
Tetanus	..	..	..	16
Cholera	..	..	..	164

This service was begun during the year to meet a very real need and has been much appreciated.

Scarlet Fever.—There were 1,372 accepted cases during the year, of which 547 (39·9 per cent.) were removed to hospital. The corresponding figures for last year were 964 and 752 (78·0 per cent.). The case-rate was 2·79 compared with 2·00 for the previous year. There was one death from cardiac complications, representing a case mortality rate of 0·07 per cent. This is the first death from scarlet fever in the city in the last three years and if comparison is made with measles (41 deaths) and whooping cough (42 deaths) during the same period, the mildness of the prevalent type of scarlet fever can be appreciated. Scarlet fever today is little more than a “sore throat with a rash,” in fact the rash is often so faint and so fleeting that it is not detected, and only subsequent peeling makes a retrospective diagnosis of scarlet fever possible. There is little justification for the removal of the majority of these mild cases to hospital, in fact a recent comparison between groups of cases treated at home and removed to Seacroft Hospital has shown that the home group had far fewer complications; and secondary cases amongst home contacts were less in the home group than in the hospital group. With the co-operation of medical practitioners it was found possible towards the end of the year to limit the admissions to hospital to less than a third of the notified cases. This was particularly valuable because the usual seasonal increase of cases in the autumn was this year above the average, and the shortage of nurses would have made it impossible to admit the majority of cases. Admission to hospital is advised when the patient requires special medical or nursing care; when the home circumstances are bad; and when cases occur in the families of food-handlers.

Return Cases.—Of the 567 cases discharged from hospital during the year, six gave rise to return cases, a rate of 1·1 per cent.

Enteric Groups.—Accepted cases during the year numbered five, all of which were due to B. Typhosus. Three cases were removed to Seacroft Hospital. Careful enquiries were made but in three of these cases the source of infection was untraced. The remaining two cases occurred among the staff of a hospital in the city. The first case was a nurse and a thorough investigation failed to reveal the source of infection. The second case was a maid working on the same ward as the nurse. On the occurrence of the first case protective inoculation with T.A.B. vaccine was given to all medical, nursing and domestic staff of the hospital.

There was one death representing a case mortality rate of 20·0 per cent.

Five chronic carriers were kept under observation during the year. One of these, a man aged 58 years, who has been a paratyphoid carrier since 1940, has, during the past two years, given five consecutive negative faeces specimens and is probably free from infection.

Measles.—There were 6,791 accepted cases of this disease during the year, of which 188 (2·8 per cent.) were removed to hospital. Of the total cases 19 died representing a case mortality rate of 0·28 per cent. The corresponding figures for last year were 895 and 10 (1·1 per cent.) with one death and a case mortality rate of 0·11 per cent. The epidemic which was expected this year commenced in the early part of January and continued until the end of June. It did not reach the proportions of some previous outbreaks and the highest number of cases reported in any one week was only 365, compared with 1,083 notified in the peak week of the last epidemic in 1945.

In anticipation of an epidemic this year a scheme to make "measles serum" available to general practitioners, hospitals and institutions, became operative on 1st January. The serum is obtained through the Blood Transfusion Service and is used either for the prevention of an attack in very young or poorly children who have been exposed to risk or for attenuation in older healthy children. At first, ordinary "adult serum" was used, but later the more valuable "convalescent serum" became available from adolescent or adult cases.

During the year 765 x 10 c.c. bottles were issued as follows :—

1. Number of bottles issued to general practitioners.
 - (a) in Leeds 305
 - (b) out of the city 59
2. Number of bottles issued to hospitals and institutions.
 - (a) in Leeds 350
 - (b) out of the city 51

Requests for serum came from many towns and districts of the West Riding of Yorkshire and from as far afield as Newcastle in the north and Chesterfield in the south.

A careful follow-up after an interval of six months has been made in 213 cases treated by general practitioners in Leeds with the following results :—

		Serum issued for :	
Result	Prevention	Attenuation	
No attack	42	18	
" Attenuated " or mild attack ..	44	41	
Attack not attenuated	9	11	
Serum not given or wrongly given or not traced	31	17	

Complications occurred in only three cases, namely, otorrhoea in two and bronchitis in the third. There were no cases of jaundice. These results which were achieved in the main by "adult serum" show that the serum has been of real benefit to an appreciable number of children. The service has been much appreciated not only by the medical profession of the city but by doctors practising over a wide area of the north-east of England whom the Department has been able to assist in response to urgent requests for serum. "Convalescent serum" and "gamma globulin," when available, should give even better results.

Whooping Cough.—A decrease in the number of accepted cases of this disease occurred during the year; 1,311 of which 89 (6·8 per cent.) were removed to hospital, as compared with 1,635 and 61 (3·7 per cent.) last year. There were 19 deaths, representing a case mortality of rate 1·4 per cent. compared with 13 (0·8 per cent.) a year ago. Of all the notifiable infectious diseases whooping cough is now the greatest "killer" of young children. The search for an effective vaccine continues and there are signs that success

may not be far away. It is to be hoped that this is so because whooping cough is a distressing disease both to the parents and the child apart from the risk of death or permanent disability. The Medical Research Council have begun a series of "field trials" to investigate the value of new vaccines and one of these trials commenced in Leeds in May. Following a brisk publicity campaign by Health Visitors it was possible to inoculate 975 children between the ages of six and fifteen months. Half of these children received the whooping cough vaccine and the other half an anti-catarrhal vaccine but the scheme has been planned so that only the Medical Research Council knows which vaccine a child receives. The vaccine has been given in three injections each of .75 c.c. with an interval of a month between injections. Reactions to the injections have generally been very slight. Each child in the scheme will be followed up by means of monthly visits for a period of two years. A careful record will be kept of all illnesses and if there is any suspicion of whooping cough, post-pharyngal swabs, cough plates and complement fixation tests will be carried out to establish a diagnosis. At the end of the experiment the results will be assessed by the Medical Research Council.

Although the evaluation of the vaccine must await the conclusion of the trial, it can be stated now that complement fixation tests carried out on random samples of children within the scheme have shown the presence of antibodies in significant quantities in those children who have received one or other of two of the vaccines; whilst children inoculated with either of the other two vaccines show no antibodies against whooping cough in their blood. These are significant findings and raise hopes of success.

Puerperal Pyrexia.—There was an increase in the number of accepted cases of this disease during the year, a result not unexpected in view of the higher birth-rate. There were 91 cases as compared with 79 a year ago, and 70 in 1945. Of these 71 (78·0 per cent.) occurred in institutions, 10 (11·0 per cent.) in the practices of general practitioners and 10 (11·0 per cent.) in midwives' practices. Of the total 29 (32·0 per cent.) were treated in Seacroft Hospital. There was one death giving a case mortality rate of 1·1 per cent. and a mortality rate per thousand total births of 0·1. This compares with 0·4 per thousand births in 1946.

Ophthalmia Neonatorum.—Again there was an increase in the number of accepted cases of this disease during the year; 34 as compared with 24 a year ago. Of these 10 (29·4 per cent.) were removed to Seacroft Hospital. The results of treatment were as follows :—

Recovery apparently perfect ..	34
Sight of both eyes affected ..	—
Still under treatment ..	—
Died from other diseases ..	—
Result not known ..	—

Pemphigus Neonatorum.—An outbreak of pemphigus neonatorum occurred in the Maternity Unit at St. Mary's Hospital during the months of December, 1946, and January, 1947. Altogether 40 babies were affected, 21 of which were removed to Seacroft Hospital and the remaining 19 sent home. There were six deaths, in five of which a severe terminal enteritis occurred, the other being a very premature baby. Six of the cases admitted to Seacroft Hospital suffered from enteritis and four of these died. One of the children sent home developed enteritis and died. All the early cases were very mild, with a very small number of blisters and practically no constitutional disturbance. Cases occurred between the fourth and fourteenth day after birth but in the majority the onset was on the seventh, eighth, ninth and tenth day after birth. There was no obvious infection amongst the staff.

The outbreak terminated at the end of January, but a few sporadic cases of mild type continued to occur for some months.

Erysipelas.—Again a substantial decrease in the number of accepted cases of this disease falls to be recorded; 92 as compared with 133 a year ago, and 151 in 1945. Of these 29 (31·5 per cent.) were removed to Seacroft Hospital.

There was one death representing a case mortality rate of 1·09 per cent.

Malaria.—Only one case of this disease was reported during the year as compared with seven last year. The infection was contracted abroad.

Dysentery.—A marked decrease in the number of accepted cases of this disease occurred during the year ; 13 (as compared with 67 last year) of which 4 occurred at home, 6 in institutions and 3 in day nurseries. The number treated at Seacroft Hospital was 8 or 61·5 per cent. of the total.

Of the 13 cases, 2 were Flexner, 6 Sonne and 2 Amoebic, while the remaining 3 were not typed. The Amoebic cases had contracted their infection abroad. There was one death giving a case mortality rate of 7·7 per cent. The mortality rate per 1,000 population was 0·002.

During the months of November and December a number of cases of mild diarrhoea occurred among babies and nursing staff at a day nursery in the city. The outbreak started at the beginning of November and cases occurred in the main singly with short intervals between each.

Specimens obtained late in the outbreak were in three instances positive for Sonne dysentery and it is reasonable to suppose that the earlier cases were similar. The exact number of cases actually occurring before bacteriological confirmation was obtained is not known. No-one was seriously ill or required hospital treatment.

Full precautions to prevent further spread of infection were immediately successful, the outbreak terminating about the middle of December.

Poliomyelitis.—There were 53 accepted cases of this disease during the year, of which 33 (62·3 per cent.) were removed to Seacroft Hospital, 9 (17·0 per cent.) to the Leeds General Infirmary and 11 (20·8 per cent.) were treated at home. There were 5 deaths, representing a case mortality rate of 9·4 per cent. The previous highest figure was in 1940 when there were 26 cases and 3 deaths. The corresponding figures for last year were 2 cases and no deaths. The number of cases occurring in England and Wales during the year was the highest on record. The incidence began to increase during the month of June, reaching a peak of 662 notifications (England and Wales) in the week ending September 6th. From then on cases gradually decreased and in the week ending December 27th they had dropped to 44. Leeds did not escape the epidemic and the number of

accepted cases was the highest ever recorded in the city. The highest incidence in Leeds was in September when there were 15 cases. The following tables show the monthly distribution of cases and the age groups affected:—

MONTHLY DISTRIBUTION.

April ..	..	..	..	..	..	..	..	1
May ..	..	..	..	..	..	..	..	3
June ..	..	..	..	..	..	..	..	8
July ..	..	..	..	..	..	..	..	7
August ..	..	..	..	..	..	..	..	12
September ..	..	..	..	..	..	..	..	15
October ..	..	..	..	..	..	..	..	6
November ..	..	..	..	..	..	..	..	1
December ..	..	..	..	..	..	..	..	—
								—
						Total ..	..	53
								—

Of the total, 37 had paralysis and 16 had no paralysis (mild abortive cases).

AGE GROUPS.

	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	Totals
Males ..	8	6	7	4	2	1	..	2	1	31
Females ..	2	5	5	5	1	..	1	2	1	22
Totals ..	10	11	12	9	3	1	1	4	2	53

The results of treatment at the end of the year were as follows:—

Died ..	..	..	..	..	..	..	..	5
Complete recovery ..	..	..	..	..	..	..	..	22
Still under treatment ..	..	..	..	..	..	..	..	23
(a) slight paralysis ..	..	..	..	..	..	..	..	14
(b) moderate paralysis ..	..	..	..	..	..	..	..	6
(c) severe paralysis ..	..	..	..	..	..	..	..	3
No details available ..	..	..	..	..	..	..	..	3

Clinically the cases varied from very mild with no paralysis to very acute with sudden onset and a rapidly fatal paralysis. The latter was exceptional.

Poliomyelitis had been a relatively rare disease and the general public became apprehensive when cases continued to be reported. This natural fear of the unknown was increased by alarmist reports. For a time Infantile Paralysis became "News," and at one stage fear of poliomyelitis was doing more harm than the disease itself.

The early diagnosis of poliomyelitis is often difficult or impossible and doctors generally responded to the appeal to isolate and notify on suspicion. This, of course, meant a revision of diagnosis in many cases.

The precautions taken by the Department included (*a*) early isolation of cases and suspected cases, (*b*) prompt and thorough disinfection, (*c*) exclusion of home contacts for three weeks in the case of school children and of adults handling food or in contact with groups of children, (*d*) a circular letter to all members of the medical profession giving all relevant information, (*e*) consultation in cases of doubt or difficulty, (*f*) general advice to the public through the press, (*g*) orthopædic supervision at all stages of the disease.

Every case was thoroughly investigated. In no instance was there evidence of case to case spread. Cases were widely scattered throughout the city; almost every ward contributed to the total and the only districts with more than three cases were Headingley (9) and Roundhay (5). Such a picture suggests a very widespread infection of the community with only an occasional case showing typical features.

The following is a summary of the investigations :—

- (1) There were 26 cases in school children. These occurred at 23 separate schools, no school having more than two cases.
- (2) No case was reported from a nursery.
- (3) There were 14 cases amongst employed persons, all at different workplaces.
- (4) There was no evidence of any spread through swimming baths. The public baths were kept open but a private swimming pool closed down. The level of chlorination at all public baths was increased to a figure adequate to kill the virus of poliomyelitis.
- (5) No particular social activity appeared to play any part in spread.

- (6) No particular foodstuff could be implicated.
- (7) Infestation with flies, bugs, fleas, etc., did not appear to have any connection with cases.

One case which occurred towards the end of the outbreak was the subject of a special enquiry and is worthy of mention.

A dental surgeon had a typical attack, but the onset was insidious and the diagnosis was not established for a week, at the end of which paralysis developed. During this week he carried on with his work and saw 30 patients during what must have been a very infective stage of his illness. The close contact between dentist and patient and the inevitable trauma to the patients' mouths were ideal conditions for spread of droplet infection. Of the 29 patients who were followed-up, 4 had extractions; 10 fillings; 2 scrapings; 5 dentures fitted; 1 abscess opened; and 7 had attended for routine inspection.

The patients were kept under observation for three weeks and during this time 7 had some symptoms of ill-health, but in none was there the slightest suspicion of poliomyelitis. Specimens of faeces from these 7 patients and from 4 who had extractions were sent to the Public Health Laboratory Service in London for examination for the virus of poliomyelitis but owing to technical difficulties it has so far been impossible to complete the examination.

Acute Polioencephalitis.—Only one accepted case of this disease occurred during the year and there were no deaths.

Encephalitis Lethargica.—No new cases of this disease were reported during the year. There were eight deaths recorded amongst previously notified cases.

Cerebro-Spinal Fever.—There were 17 accepted cases of this disease during the year; and of these 12 (70·6 per cent.) were removed to Seacroft Hospital, as compared with 13 and 4 (30·8 per cent.) last year.

There were 6 deaths giving a case mortality rate of 35·3 per cent. as compared with 7 and 53·8 per cent. in 1946.

Anthrax.—In the last two months of the year two cases of this disease were reported to the Department. Both patients had been employed in the handling of goat skins at a large tannery in the city. A fatal case from the same source was reported last year.

Detailed information was sent to H.M. Inspector of Factories, who is responsible for measures of protection within the factory. An inspector from this Department supervised the necessary measures of disinfection. Both the patients had been diagnosed at a very early stage and made a rapid recovery.

Influenza.—There were 42 deaths from influenza as compared with 49 last year. The death-rates were 0·09 and 0·10 respectively.

Pneumonia.—Accepted cases during the year numbered 305 of which 286 (93·8 per cent.) were primary and 19 (6·2 per cent.) influenzal. The corresponding figures for last year were 367, of which 320 (87·2 per cent.) were primary and 47 (12·8 per cent.) influenzal. There were 260 deaths from all forms of pneumonia as compared with 318 a year ago. The mortality rates were 0·53 and 0·66 respectively.

Bronchitis.—There was a substantial increase in deaths from this disease, 534 as compared with 298 last year, the death-rates being 1·09 and 0·62 respectively. A substantial part of this increase is only apparent and is due to an alteration in our classification of deaths. Nevertheless, there was also a real increase compared with recent years. The monthly figures do not suggest that the exceptionally cold weather of the early part of the year was the cause.

Diarrhoea and Enteritis.—A substantial increase in the number of deaths from this disease in children under two years of age fails to be recorded, 122 compared with 53 last year. The death-rates per 1,000 births were 11·22 and 5·36 respectively. This disease varies from year to year both in incidence and severity. The high figure of 122 deaths is partly explained by the big increase in the birth-rate. All the deaths with one exception occurred in children under the age of one. An investigation into this disease will be reported on later.

Neo-Natal Diarrhoea.—During the months of September, October and November, 50 cases of mild enteritis occurred among new born babies at St. Mary's Hospital. The cases occurred singly and were spread out evenly throughout the whole period. Three wards were affected.

The children were not in any way upset and all recovered. No mothers were affected. No pathogens were isolated. The cause of the outbreak was not discovered and after routine measures of control had proved ineffective the two wards chiefly affected were closed and the outbreak ended.

Cancer.—There were 947 deaths from this disease as compared with 960 last year and 969 in 1945. The corresponding death-rates per thousand of the population were 1.92, 1.99 and 2.15 respectively.

Food Poisoning.—During the year seven sporadic cases of food poisoning due to an organism of the *Salmonella* group, all in different households, came to the notice of the Department. Six of these were removed to Seacroft Hospital. All recovered. Enquiries in all seven cases failed to reveal the source of infection.

The following outbreaks of suspected food poisoning were reported to the Department and investigated.

(1) In January, the manager of a pork butcher's shop in the centre of the city reported that some of his customers had complained of diarrhoea and vomiting which they attributed to pressed meat sandwiches from his shop. A number of his employees had been similarly affected. None of the suspected meat was available for examination. The premises were found to be very satisfactory. Bacteriological examination of the employees and materials was negative. Advice on the hygienic handling of foods was given. No further reports of illness were received.

(2) In June, six persons in three adjoining private houses complained of diarrhoea and sickness. All recovered. Investigations were made and the only common factors appeared to be the milk and water supplies. These were examined with negative results. The precise cause of the illness could not be established.

(3) In July, the manager of a clothing factory in the city reported 35 cases of diarrhoea among his employees, although none had been sufficiently ill to remain off work. The works canteen came under suspicion, but none of the food eaten was available for examination.

The preparation of the food was hygienic, but the food storage was poor and there was ample opportunity for contamination by flies or vermin. The temperatures in the kitchen, food-store and canteen were too high. These and other defects were pointed out to the manager of the firm, who promised to have them remedied. A sample of egg powder from the canteen was submitted for bacteriological examination but no pathogenic organisms were isolated.

A member of the kitchen staff who had had intermittent attacks of diarrhoea during the month of June was temporarily excluded from the kitchen, but her bacteriological examination was negative.

No specific cause for the outbreak was traced and all the patients recovered.

(4) In November, diarrhoea and vomiting occurred among the pupils and staff at a large Secondary Grammar School in the city. Approximately 107 boys and 16 teachers were affected. Most of the victims returned to school the following day and none required hospital treatment.

Out of a total of 404 persons who took school lunch 123 were known to have been affected. The meal in question was prepared at a school kitchen which also supplies 10 other schools in which no cases of illness were reported. The kitchen concerned was visited and the composition and method of preparation of the meal thoroughly investigated. No food was left over which could be submitted for examination.

One member of the kitchen staff gave a history of diarrhoea on the day previous to the outbreak but on the day in question only handled potatoes which were subsequently boiled.

A number of defects in the kitchen equipment and methods were discovered and reported to the Supervisor of School Meals.

Handling of Food, etc., by Infected Persons.—It was not found necessary to exercise the powers conferred by Section 42 of the Leeds Corporation Act, 1930, during the year.

Scabies.—The number of cases of scabies notified voluntarily by medical practitioners during the year was 604. All were visited and arrangements made for their attendance, together with contacts, at either St. James's Hospital or Sweet Street Clinics. The total number of cases ascertained from this and other sources was 2,019. In all, 4,057 persons received treatment at the two clinics.

The following table gives the comparative figures since the Scabies Order came into operation in 1942 :—

SCABIES ORDER 1941.

Year.	No. of cases notified by Medical Practitioners.	No. of cases treated (from notifications and other sources).	Total No. of treatments (including contacts and re-infestations).
1943 ..	1,645	8,285	12,743
1944 ..	1,515	6,815	11,494
1945 ..	1,432	6,614	10,801
1946 ..	1,406	5,354	9,480
1947 ..	604	2,019	4,057

It is gratifying to record such a considerable decline in incidence. A decrease has been noted each year since 1943 but the figures for this year are less than half those of the previous year. The decrease is so substantial that it was doubted whether all cases were being notified and a circular letter was sent to the medical profession of the city towards the end of the year but failed to produce any increase.

The Scabies Order, 1941, made under the Defence Regulations, 1939, as a wartime measure, was rescinded on December 31st, 1947. In future, the powers given under the Public Health Act, 1936, and the Education Act, 1944, will be used where necessary.

It was not found necessary to take any case to Court during the year under the Scabies Order.

Pediculosis Capitis.—During the year, 2,303 persons were treated at the clinic, involving a total of 2,611 treatments. The number of visits paid to houses was 2,054. It is gratifying to again record a decrease in the incidence of this condition, particularly in school children.

The following table gives the comparative figures since 1944 :—

PEDICULOSIS CAPITIS.

Year.	No. of persons treated.	No. of treatments involved.	No. of visits paid to houses.
(4 months) 1943	56	86	270
1944	1,178	2,008	1,688
1945	3,808	4,987	3,098
1946	2,946	3,502	2,699
1947	2,303	2,611	2,054

All cases are treated at Sweet Street Clinic except when a journey is impracticable. Arrangements are then made for home treatment. Emphasis is placed on the simultaneous treatment of all members of a household in order to prevent re-infestation. D.D.T. emulsion or powder is the basis of treatment and continues to give good results.

AMBULANCE WORK.

Infectious Diseases, Ambulance Work and Disinfection.—

Ambulance Work.—During the year under review 1,432 cases were removed to the Seacroft Infectious Diseases Hospital. Over and above these, 311 journeys were made for the transference of patients from one institution to another or for returning patients home on discharge from hospital.

On the 16th November, the four ambulances used for the transport of infectious diseases cases were transferred from the Stanley Road Depot to the Municipal Ambulance Service and henceforth will be under the control of that Department.

The following are details of the cases removed to Seacroft Hospital by the ambulances :—

Scarlet Fever	..	..	..	604
Diphtheria	..	..	..	121
Typhoid Fever	..	..	..	8
Measles	..	..	..	182
Other Diseases	..	..	..	517
				—
				1,432
				—

(As compared with 1,880 in 1946.)

The total mileage run by the ambulances was 18,986 as compared with 23,493 during 1946.

Disinfection.—The following work was done by the disinfecting staff :—

Houses disinfected	..	..	716
Rooms	..	..	1,283
Beds and mattresses	..	..	4,003
Articles of bed linen	..	..	5,174
Articles of clothing	..	..	3,928
Other articles	..	..	467

Disinfectant baths were provided and disinfection of clothing carried out in respect of 30 infectious disease contacts.

The total mileage run by the disinfection and bedding vans was 21,008.

Verminous Persons.—The number of baths given to verminous persons at the cleansing station was 298, whilst 80 rooms and 3,128 articles of clothing and bedding were disinfected.

Disinfestation.—The following table shows the work done during the year at the Disinfesting Station, Stanley Road.

1. Work in connection with house fumigation :				
(a) No. of articles disinfected by steam ..	..	825		
(b) No. of houses fumigated .. ..	..	37		
2. Fumigation and disinfection of articles from infested houses at the request of the Housing Department :				
(a) No. of articles fumigated by H.C.N. ..	..	11,543		
(b) disinfected by steam ..	..	3,923		
(c) houses concerned in above ..	..	238		
3. Fumigation and disinfection of articles from private houses or other sources :				
(a) No. of articles fumigated by H.C.N. ..	..	2,158		
(b) disinfected by steam ..	..	157		
(c) houses concerned in above ..	..	259		

N.B.—The greater part of the work in Section 3(a) is in respect of moth infestation of upholstered furniture.

This subject is again referred to on pages 144 and 149.

Municipal Ambulance Service.—The following tables show the number of cases dealt with by the Municipal Ambulance Service during the year. For comparison the figures for the years 1944, 1945 and 1946 are included.

PATIENTS REMOVED BY AMBULANCE.

Type of Case.	1944	1945	1946	1947
Accident	1,673	1,703	1,681	1,815
Illness	823	895	869	996
Maternity	3,017	2,954	4,030	4,214
Tuberculosis	294	300	433	622
Hospital	5,063	5,112	6,404	6,811
Social Welfare	225	398	247	264
Mental	99	91	116	127
Lunacy	37	28	34	37
Special treatment	1,507	2,218	2,692	3,758
Others	1,661	2,310	2,690	3,891
Total Cases Removed ..	14,399	16,009	19,196	22,535
Total Mileage	104,252	109,092	144,311	146,021

CASES REMOVED BY SITTING-CASE CAR.

Type of Case	1944	*1945	1946	1947
Hospital	596	3,105	7,567
Maternity and Child Welfare	..	63	337	356
Immunisation	81	436
Doctors and Midwives	583	2,129	2,870
Others	104	290	428
Total	1,346	5,942	11,657
Mileage	19,202	54,572	91,989

*From 1.7.45.

Emergency Medical Service.—During the year the two cars used in connection with the Emergency Medical Service carried a total of 2,255 cases with a mileage of 13,440. The figures are included in the total for sitting-case cars shown in the above table.

Vehicular Strength.—At the end of the year there were in service 24 ambulances and four cars, four of the ambulances being used for the transport of infectious diseases.

It is anticipated that the present number of ambulances will not be sufficient to deal with the additional work when the nationalisation of the hospitals comes into force.

Great difficulty has been experienced in dealing with the considerable increase in the work of the sitting-case car service. The cars were old when purchased on the disbandment of the Civil Defence Service and are now fast approaching that state when they cannot stand up to the heavy demands made upon them. Had it not been for the two cars provided for the Emergency Medical Service, it would have been impossible to cope with increased work ; even so it was necessary to call upon the owners of private hire cars on 387 occasions at a cost to the Department of £367.

On 1st September the Department became responsible for the removal of bodies to the Mortuary. From 1st September to the end of the year, 178 such removals had taken place.

During the year an ambulance equipped with a loud-speaker system was in use as a mobile medical unit in connection with diphtheria immunisation.

Garage Accommodation.—The existing garage accommodation at Torre Road is inadequate to house the present fleet of vehicles in a manner which gives easy access and in the near future some further garage accommodation will have to be considered.

General.—It will be observed that the work of the Service has increased considerably since 1944, the number of cases carried by ambulance having risen from 14,399 to 22,535 or 56·5 per cent., whilst the increase in the number of cases carried by car in 1947 compared with 1946 (the first complete year of this Service) was 5,715 or 96·2 per cent. This increase has put a heavy strain on the administrative staff and until such time as further clerical assistance is obtained will necessitate the present staff working over regularly in order that the work of the Department may be kept up-to-date.

Seacroft Infectious Diseases Hospital

BY

E. C. BENN, M.B., Ch.B., D.P.H.

Medical Superintendent

The thirty-five chronic patients who remained after the closure of Seacroft Emergency Hospital had been transferred to other hospitals by 22nd February, 1947.

The conversion of Wards "H" and "J" to cubicles was almost completed in 1947 but Ward "J" is delayed by lack of steam piping, electrical gear and certain equipment. Ward "H" would be in use by now were it not for the shortage of nurses which is causing a critical situation and limiting the usefulness of the hospital. As a result of the levelling of salaries and hours of work, Infectious Diseases Hospitals now find themselves in competition for student nurses with general hospitals. In the absence of any financial incentive in favour of fever nursing, student nurses naturally prefer to take general training and are no longer inclined to take the fever certificate as a preliminary to general training. Replacement of normal wastage is not forthcoming and unless nurses can be recruited one or more additional wards must soon be closed with a resulting restriction of admissions.

Structural Alterations.—Ward "I," which had not been used for the admission of patients for many years, was converted into a teaching unit for student nurses. It contains large and small lecture rooms, a well equipped room for practical demonstrations, sister tutor's office and cloakrooms, and offers many advantages over the very limited accommodation previously allocated for the teaching of nurses.

With the exception of Ward "A," which is at present being painted and repaired internally, little has been done during the year to rehabilitate the hospital after seven years use as a unit of the Emergency Medical Service. Further, difficulty in obtaining materials and general restrictions on structural repairs is interfering with the normal maintenance with the result that dilapidations have accumulated and now present a formidable problem.

Wards "R.O.S.," erected as temporary structures 45 years ago, had been listed for demolition in 1939 because they were no longer capable of serving their original purpose on account of normal wear and tear. Demolition, which had been postponed during the war, was started in 1947 and has been almost completed but the site still remains to be cleared.

Meteorological Records.—Daily observations were made and are summarised on pages 44 and 45. The observations made at this station have for many years been of interest to the British Rainfall Organisation, the Meteorological Office and several other national and local organisations to which meteorological information is sent.

Admissions.—The number of patients admitted during 1947 was 1,782 as compared with 2,003 in 1946. Admissions were at times governed by the number of beds available and it was necessary slightly to restrict admission of scarlet fever for short periods early and late in the year. The greatest number of patients in hospital at any one time was 151 on February 17th and the smallest 67 on September 13th and 17th. The daily average number of patients was 108.7 and the average stay in hospital of the 1,795 patients in whom treatment was completed during the year was 24.1 days as compared with 27.0 days in the year 1946.

The number of direct admissions from outside the city boundaries was 128 and the various notifications and the districts from which they were admitted are shown in the table on page 42.

Diphtheria.—During 1947, 121 patients were admitted with a notified diagnosis of diphtheria. Revision of diagnosis was required in 69 of these, who were actually suffering from :—

Tonsillitis	48
Laryngitis	12
Measles	6
Cervical adenitis	2
Scarlet Fever..	1

In 52 cases the diagnosis of diphtheria was confirmed, as compared with 151 in 1946, but 10 of them were healthy carriers. Of the remainder, 6 had simple nasal infections and 36 were suffering from faecal diphtheria. Of the faecal cases, 23 were clinically mild, 10 of moderate severity and 3 severe, of which one died. Only three cases showed complications, in each instance post-diphtheritic paralysis. The single fatal case, a boy aged 6 years, was admitted on the fourth day of the disease with extensive faecal diphtheria and hyper-toxaemia. He died within 48 hours of admission.

Immunised Patients.—Of the 52 patients diagnosed as diphtheria, 17 were proved to have received a course of diphtheria prophylactic. The 17 cases were classified as: severe faecal 1, moderate faecal 3, mild faecal 10, nasal 1 and carriers 2. All made rapid recoveries and none showed complications.

Type of Organism.—The types of organism involved were:—*gravis* 16, *mitis* 18, *intermedius* 7, atypical 8 and not typed 3.

Scarlet Fever.—The number of patients admitted during the year was 594 as compared with 753 in 1946. The disease, as in recent years, was of an exceptionally mild type. Two cases were considered to be septic in type and one toxic. One death occurred, the first since 1944, in a girl aged 13 years, who died of post-scarlatinal rheumatic endocarditis.

As has been pointed out in previous reports, endocarditis, usually following acute rheumatism in the second or third week of the disease, is now the most important complication of scarlet fever. The incidence is high and appears to be increasing. Acute otitis media is still a common complication but it responds well to penicillin therapy and it is very uncommon for a patient to leave hospital with a chronic otorrhoea,

Complications numbering 156 occurred in 114 patients out of 567 completed cases. This gives a complication rate of 20.1 per cent. The complications are listed below :—

Adenitis (including one suppurative)	..	18
Albuminuria and nephritis	..	10
Bronchitis	.. .. ..	1
Carditis	.. .. ..	20
Chorea	.. .. ..	3
Erythema nodosum	.. .. ..	2
Haematuria	.. .. ..	1
Jaundice	.. .. ..	1
Otorrhoea	.. .. ..	33
Pericarditis	.. .. ..	1
Pneumonia	.. .. ..	2
Purpura	.. .. ..	1
Quinsy	.. .. ..	2
Relapse	.. .. ..	2
Rheumatism	.. .. ..	11
Rhinitis	.. .. ..	15
Sepsis—minor local	.. .. ..	7
Sinusitis	.. .. ..	3
Tonsillitis	.. .. ..	13
Ulcerative stomatitis	.. .. ..	3
Vaginal discharge	.. .. ..	7
 Total	.. ..	156 <hr/>

In last year's report mention was made of the administration of penicillin to a controlled series of cases for three days after admission to hospital in an attempt to reduce the complication rate. The experiment was repeated in 1947 in a small series of cases using a larger dose for a longer period. The results were completely negative, probably because the patients were nursed in large open wards where the chances of re-infection on withdrawal of penicillin were considerable. It is possible that much better results would be obtained if each patient could be nursed in single-cell isolation.

Amended Diagnosis.—It was found necessary to revise the diagnosis in 60 cases which is equivalent to 9·6 per cent. of all cases admitted with a notified diagnosis of scarlet fever. The final diagnosis of these patients is listed below:—

Adenitis	..	..	..	..	..	1
Chickenpox	..	..	..	..	..	3
Common cold	..	..	..	..	..	3
Dermatitis	..	..	..	..	..	1
Dietetic deficiency	..	..	..	..	..	1
Erythema	..	..	..	..	..	5
Measles	..	..	..	..	..	10
Observation	..	..	..	..	..	16
Pharyngitis	..	..	..	..	..	1
Rubella	..	..	..	..	..	12
Streptococcal carrier	..	..	..	..	..	1
Teething	..	..	..	..	..	1
Tonsillitis	..	..	..	..	..	5
						—
Total					..	60
						—

The return case rate was 1·1 per cent.

Cross Infection.—Ten patients were found to be incubating other diseases when under treatment for scarlet fever. The following table shows the number of primary cases and the number of cross infections to which they gave rise.

			Incubating on admission.		Secondary cases.
Chickenpox	3	10
Erysipelas	1	—
Measles	3	9
Rubella	3	—
				—	—
Totals			..	10	19
				—	—

Measles.—During the year, particularly in the early months when the disease was epidemic in the city, 190 cases of measles were treated, of which ten were notified as scarlet fever, six as diphtheria, four as rubella, three as whooping cough and two as each of the following:—gastro-enteritis, meningitis and pneumonia.

The number of deaths was five, which gives a case mortality of 2·6 per cent. The cause of death was broncho-pneumonia in three cases, encephalitis in one and obstructive laryngitis with collapse of lung unrelieved by tracheotomy in one.

Of the 190 measles patients, 83 were admitted from other institutions in the city.

Complications numbered 88. They occurred in 65 patients and are listed below :—

Abscess	2
Adenitis, suppurative	1
Blepharitis and/or conjunctivitis	7
Broncho-pneumonia	21
Encephalitis	2
Enteritis	8
Gangrene of finger tips	1
Laryngitis	13
Laryngitis, obstructive	2
Lobar pneumonia	4
Otitis media	18
Pleural effusion	2
Rhinitis	2
Ulcerative stomatitis	3
Sepsis, minor	2
 Total	 88

Poliomyelitis.—The number of cases admitted during 1947 was 48 of which five died. All the deaths occurred in patients with widespread paralysis involving the respiratory system and in four of the five there was considerable bulbar involvement.

Of the 48 confirmed cases of poliomyelitis, four were notified as cerebro-spinal fever. Eleven patients recovered without developing any paralysis, nine showed transient paralysis which had cleared up by the time the patient was discharged and 23 still showed paralysis on termination of treatment at this hospital. In each case of persistent paralysis, arrangements were made for orthopædic treatment either by transfer to an orthopædic hospital or by reference to an orthopædic out-patient clinic.

On more than one occasion two patients required treatment in the Both respirator at the same time and the demand for a second machine was met by the co-operation of the Medical Superintendent of Scotton Banks Sanatorium who lent his respirator to Seacroft Hospital over a period of several months.

Meningitis.—Thirty-two patients suffering from meningitis, of whom five were notified as poliomyelitis and three as epidemic gastro-enteritis, were treated during the year. The types of meningitis are shown in the following table :—

Type.		Number.	Died.
Benign lymphocytic	..	2	—
Meningococcal	..	13	1
Pneumococcal	..	6	2
Tuberculous	..	2	2
Purulent but bacteriologically negative	..	9	2
		—	—
Total	..	32	7
		—	—

Most of the patients in the bacteriologically negative group had received sulphanilamide treatment before admission to hospital with the result that the cerebro-spinal fluid was sterile on examination. The fatal case of meningococcal meningitis was a child of three months admitted on the 22nd day of disease with complications which included blindness, deafness and hydrocephalus.

Gastro-enteritis.—The diagnosis of gastro-enteritis was confirmed in 159 patients. To these must be added nine children under the age of 3 years, who were diagnosed enteritis, one entero-colitis and one diarrhoea, which gives a total of 170 cases of which 73 (42·9 per cent.) died. These figures show a considerable increase over those for 1946, which were 92 cases of which 18 (19·6 per cent.) died. Patients were admitted at all stages of the disease but there appeared to be a tendency to delay notification and a request for hospital treatment until the patient had reached a late stage of the disease. The type of disease was severe and gross dehydration of the patient on admission was the rule. As is usual, the disease was almost confined to infants, 150 of 170 patients were under one year and all but two of the 73 deaths occurred in this group. The youngest patients suffered most severely and of the 58 infants in the first 3 months of life, 37 (63·8 per cent.) died.

Patients were admitted throughout the year but the incidence in 1947 tended to revert to the classical summer prevalence. The number of admissions of gastro-enteritis was lowest in the first quarter when the monthly average was less than six and the highest during July, August and September, when the average monthly number of admissions was 21.

Whooping Cough.—During the year 102 patients, mostly selected patients from other institutions in the city or complicated cases, completed treatment. Of these, 14 (13·7 per cent.) died.

Complications were present in 44 patients (43 per cent.). Convulsions occurred in ten (with broncho-pneumonia in 4), eight of which were fatal. Pneumonia was seen in 16 patients of which five died and there were three cases of enteritis of which one died. Other complications occurred singly as follows:—bronchitis, epistaxis, otitis media, subconjunctival haemorrhage, ulcerative stomatitis and glossitis.

Erysipelas.—The number of patients admitted to hospital remains low, and relapses and second attacks are seen only seldom by comparison with the time before the introduction of sulphanilamide therapy. Thirty patients were admitted during 1947 and of these one died. He was a man of 67, moribund on admission, with chronic bronchitis and hemiplegia. The remaining 29 patients, of whom 25 were infection of the face and four of the leg, showed no complications.

Puerperal Pyrexia.—Patients admitted numbered 44 as compared with 47 in the previous year. The one death was due to toxæmia following pelvic cellulitis and took place within 48 hours of admission to hospital. Two cases were complicated by pleural effusion, one by bilateral femoral thrombosis, one by mastitis and one by uraemia.

Venereal Diseases.—The arrangement for the in-patient treatment of female patients suffering from syphilis continues to work well. Patients are transferred from the Venereal Diseases Department and are drawn from a wide area. Arrangements have been made between the Leeds City Council and the three Ridings for the treatment of patients so transferred. The number of women treated during 1947, including seven cases of gonorrhœa, was 181 by comparison with 251 in the previous year.

Tuberculous Meningitis and Miliary Tuberculosis.—At the request of the Streptomycin Committee of the Faculty of Medicine which was set up in September at the request of the Ministry of Health, a small number of beds, which varies according to the beds and nursing staff available but which has not yet exceeded seven, was allotted for the treatment of miliary tuberculosis by streptomycin. The specialised clinical work is carried out by a Class III Registrar who has been appointed for the purpose and who is responsible for clinical supervision of other patients in the city who are receiving streptomycin in addition to those at Seacroft Hospital.

Arrangements have been made with other local authorities for the treatment of their cases at Seacroft Hospital when accommodation permits and a special ward would have been opened for streptomycin cases if nursing staff had been available. The number of cases treated so far is small and it is not yet possible to comment on the results.

Staff.—The health of the staff has been generally good and no case of scarlet fever or diphtheria has occurred. As has been the practice for many years all recruits to the staff who may come in contact with patients or infected material, including all nurses, maids and laundry workers, are Schick tested and Dick tested on joining the staff. All positive reactors are immunised against diphtheria and scarlet fever, and against enteric fever also if that disease is being admitted.

DISEASE.	No. of Cases.	Deaths.	DISEASE.		No. of Cases.	Deaths.
			Brought forward ..	Hodgkin's Disease ..		
Abdominal Tumour	1	..	..	Impetigo ..	..	..
Abortion
Abscesses and Boils
Actinomycosis
Acute anterior poliomyelitis
Adenitis
Adenitis
Aerycke infection
Arthritis
Born in hospital
Bronchitis
Carcinoma of Bronchus
Carcinoma of Cervix
Cerebral Haemorrhage
Cerebral Thrombosis
Cerebro-spinal Fever
Chickenpox
Common Cold
Constipation
Dermatitis
Diarrhoea
Dietetic deficiency
Diphtheria
Dysentery
Enteric Fever
Enteritis
Entero-colitis
Epilepsy
Erysipelas
Erythema, Circinate
Erythema, Papular
Erythema, Simple
Erythema, Toxic
Excoriation of Buttocks
Furunculosis
Fracture of Tibula and Fibula
Gastro-enteritis
Gingivitis
Glandular Fever
Gonorrhœa
Headache (post-meningeal)
Herpes Zoster
Total
	430	84				
Carried forward				

No. of Cases.

Total

No. of Cases.

1,795

130

CASES ADMITTED TO SEACROFT HOSPITAL
FROM AREAS OUTSIDE THE CITY BOUNDARY.

	Cerebro-spinal Fever.	Diphtheria.	Erysipelas.	Measles.	Poliomyelitis.	Puerperal Pyrexia.	Scarlet Fever,	Tuberculosis.	Venereal Diseases.	Other Diseases.	Total.
Allerton Bywater	I	..	I
Barnsley	I	I	..	I	..	2
Batley	I	I	..	I
Bradford	..	I	..	..	I	..	..	..	..	..	1
Castleford	I	..	I	2	..	..	..	..	12
Churwell	I
Dishforth	I	..	..	..	..	..	I
Featherstone	2	..	2
Garforth	I	..	2
Halifax	I	..	I	I
Harrogate	I	..	I
Hemsworth	I	..	I
Heckmondwike	I	..	I
Horsforth	I	..	..	I	..	2
Huddersfield	I	..	I
Hull	I	..	..	I
Knottingley	I	..	I
Malton	I	..	I
Menston	I	..	..	I
Micklefield	I	..	I
Monk Fryston	I	..	I
Morley	I	..	I
Normanton	I	..	..	..	I
Ossett	I	..	I
Otley	I	..	I
Pollington	I
Pontefract	3	..	..	..	..	6
Pudsey	4	..	..	..	..	..	..	..	2
Rothwell	..	2	..	..	5	..	45	..	..	5	62
Selby	I	..	..	..	..	I	2
Sherburn	I	..	2
Skegness	I	..	..	I
Stanley	2	..	..	..	..	..	2
Swillington	I	..	..	..	..	..	I
Tadcaster	I	..	..	..	..	..	I
Tingley	I	I	I	..	..	I	..	I
Wakefield	I	I	I	..	..	..	3
Wetherby	I	..	I	..	..	I	3
Wombwell	I	..	..	..	..	..	I
Totals	3	4	I	I	15	10	49	6	31	8	128

SEACROFT HOSPITAL, LEEDS.

YEAR 1947.

ABSTRACT FROM REGISTERS.

	Diphtheria.	Enteric Fever.	Erysipelas.	Measles.	Pertussis.	Scarlet Fever.	Small Pox.	Other Diseases.	TOTAL.
Patients remaining in Hospital, December 31st, 1946	2 (25)	.. (..)	1 (3)	1 (..)	14 (5)	51 (113)	.. (..)	59 (35)	128 (181)
Admitted in 1947	52 (128)	3 (1)	30 (45)	189 (10)	89 (61)	594 (753)	.. (..)	825 (1,005)	1,782 (2,003)
Total treated	54 (153)	3 (1)	31 (48)	190 (10)	103 (66)	645 (866)	.. (..)	884 (1,040)	1,910 (2,184)
Discharged	51 (145)	1 (1)	29 (47)	185 (9)	88 (43)	566 (815)	.. (..)	745 (924)	1,665 (1,984)
Died	1 (6)	.. (..)	1 (..)	5 (..)	14 (9)	1 (..)	.. (..)	108 (57)	130 (72)
Completed cases	52 (151)	1 (1)	30 (47)	190 (9)	102 (52)	567 (815)	.. (..)	853 (981)	1,795 (2,056)
Mortality per cent.	1.9 (3.9)	.. (..)	3.3 (..)	2.6 (..)	13.7 (17.3)	0.2 (..)	.. (..)	12.7 (5.8)	7.2 (3.5)
Patients remaining in Hospital, December 31st, 1947	2 (2)	2 (..)	1 (1)	.. (1)	1 (14)	78 (51)	.. (..)	31 (59)	115 (128)
Average days in Hospital for recovered patients	29.6 (36.7)	49.0 (41.0)	13.3 (16.6)	23.1 (32.9)	40.6 (45.7)	31.4 (33.5)	.. (..)	16.8 (19.4)	24.1 (27.0)

The corresponding figures for 1946 are shown in brackets.

METEOROLOGICAL RECORD

1947.	SUNSHINE.			SUNSHINE.			EARTH TEMPERATURE. (4° 0' below surface).		
	Total. hr. min.	Max. in 24 hrs. hr. min.	Date.	No. of days no Sunshine.	Max.	Date.	Min.	Date.	
January ..	32 40	5 50	17	17	41	1-5	39	28-31	
February ..	43 60	8 30	24	16	39	1-4	37	15-28	
March ..	81 20	9 40	2	11	38	30 and 31	36	3-27	
April ..	161 35	11 10	16	2	43	24-30	38	1-3	
May ..	203 00	13 10	28	1	51	31	43	1-6	
June ..	197 20	14 10	12	1	55	27-30	51	1-2	
July ..	161 20	9 40	22	2	58	31	55	1-3	
August ..	277 20	12 10	10	..	61	28-29	58	1-8	
September ..	172 30	11 30	1	1	60	1-14	57	28-30	
October ..	110 35	8 40	20	7	57	1-3	53	30-31	
November ..	109 45	8 30	15	4	53	1	47	30	
December ..	29 00	4 50	20	18	47	1-3	44	11-31	
Year ..	1,580 25	14 10	12 June	80	61	28-29 Aug.	36	3-27 Mar.	

METEOROLOGICAL RECORD

(Observations made at 9.30 a.m.).

HEIGHT FROM GROUND :—Barometer, 2 ft.; Thermometers, 4 ft.; Rain Gauge, 1 ft. (235 ft. above sea-level).

1947.	*BARO-METER, 9-30 a.m.	TEMPERATURE.						RAINFALL.						WIND—No. of Observations.													
		Shade—Minimum and Maximum.			Mean.	Min.	Date.	Max.	Date	Total Inches.	Max. in 24 hrs.	Date.	No. of days on which .01" or more fell.	N	E	S	W	N.W.	N.N.W.	W.N.W.	W.S.W.	S.W.	S.S.W.	A.	W.A.	N.W.W.	N.N.W.W.
		20	29	56											1	2	3	5	1	—	—	—	—	—	—	—	—
January	29·978	35·3	20	29	56	16	2·47	0·36	11	11	1	2	6	1	2	3	5	1	—	—	—	—	—	—	—	—	
February	29·823	28·6	12	24	40	27	3·39	0·58	3	18	1	4	8	4	7	1	—	1	—	—	—	—	—	—	—	2	
March ..	29·494	36·5	10	2	59	17	5·46	1·30	12	17	4	1	7	4	—	3	2	1	1	2	1	1	1	—	—	—	
April ..	29·948	46·9	31	2	68	16	2·44	0·57	7	14	—	1	5	1	—	—	—	1	4	8	4	1	1	3	—	—	
May ..	30·023	53·7	34	1	84	29	4·72	1·88	29	17	3	2	5	5	—	4	3	1	—	3	—	1	2	1	—	—	
June ..	29·917	59·8	41	6	85	3	2·91	1·23	14	15	6	2	3	2	—	—	—	1	1	2	8	1	—	1	3	—	
July ..	29·921	62·3	47	27	79	28	2·23	0·62	16	15	1	2	3	2	1	—	1	—	1	2	5	2	4	2	3	—	
August ..	29·866	65·3	48	8	83	16	0·39	0·23	4	4	2	5	9	7	—	—	—	—	—	—	1	—	3	1	3	3	3
September	30·030	60·0	35	29	80	3	1·26	0·31	20	11	2	—	3	—	1	—	1	—	1	2	—	3	3	4	5	3	
October	30·206	53·8	36	31	73	11	1·78	0·75	17	11	—	2	7	2	—	1	2	—	2	3	1	6	3	2	—	—	
November	29·780	43·5	21	30	63	21	1·96	0·61	10	16	1	4	—	1	—	—	—	1	3	3	2	5	3	2	5	—	
December	29·939	40·6	22	1 and 2	54	12	2·41	0·59	27	18	3	—	2	1	2	1	1	—	—	—	—	—	10	2	4	5	
Year ..	29·910	48·8	10	2 Mar.	85	3 June	31·42	1·88	29 May	167	24	25	58	30	14	9	12	12	7	11	19	36	38	24	18	28	

N.
* Corrected to temperature and mean sea level at Liverpool.

Venereal Diseases.

The number of deaths certified as due to syphilitic diseases was 45, an increase of 11 on the figure for the previous year. The corresponding death-rate was 0·09 per thousand of the population.

Work of the Treatment Centre.—The total number of new Leeds cases registered at the Leeds General Infirmary was syphilis 291 males and 211 females, gonorrhoea 412 males and 130 females, and other diseases not venereal 644 males and 350 females. There were no cases suffering from soft chancre during the year. As compared with the previous year these figures represent in the case of syphilis an increase of 43 males and 34 females; in soft chancre a decrease of two males; in gonorrhoea a decrease of 148 males and 129 females and in other diseases not venereal a decrease of 486 males and 45 females. Taking the cases of all types there was a decrease of 733 as compared with the figure for the previous year, but taking syphilis and gonorrhoea together the decrease was 200.

The total attendances of all Leeds cases was 47,331, a decrease of 5,345 on the figure for the previous year.

The number of cases ceasing to attend before completion of treatment or final tests of cure from Leeds and the other contributory areas was 470 or 7·5 per cent. of the total attending the centre as compared with 429 or 6·6 per cent. for the previous year.

The number of in-patients treated at Leeds General Infirmary was 96 as compared with 460 for the previous year and the corresponding number of in-patient days was 2,003 as against 3,313 for 1946.

The report by Dr. Robert Lees, Director of the Venereal Diseases Department at the Leeds General Infirmary, on page 50 gives details of the work carried out at the Treatment Centre.

Defence (General) Regulation 33B.—The notification of venereal diseases under Defence (General) Regulation 33B continued in force during the year. The table appended gives comparative details for the years 1946 and 1947.

COMPULSORY TREATMENT OF VENEREAL DISEASES.
DEFENCE (GENERAL) REGULATION No. 33B.

	1946			1947		
	Male	Female	Total	Male	Female	Total
Notifications on Form 1	1	54	55	4	30	34
No. of contacts specified	1	37	38	4	24	28
No. specified on two or more Forms 1	..	10	10	..	6	6
Form 2 served	..	5	5	..	3	3
Examined by persuasion after dual notification	..	2	2	..	1	1
Examined after service of Form 2	..	2	2	..	..	..
Form 3 served	..	7	7	..	5	5
Untraced	..	3	3	..	..	..
Clearance certificate issued	..	19	19	..	1	1
Transferred to other areas

Supply of Salvarsan Substitutes.—The number of medical practitioners in the area qualified to receive free supplies of salvarsan substitutes up to the end of the year was 55 and the amount distributed was 550 doses as compared with 824 doses in 1946.

For particulars of the work of the special clinic for mothers and babies suffering from venereal diseases held in connection with Maternity and Child Welfare, see page 115.

LEEDS PATIENTS.

		Year 1946		Year 1947		Increase or Decrease.	
		M.	F.	M.	F.	M.	F.
Syphilis ..	first cases	248	177	291	211	+ 43	+ 34
Soft chancre ..	"	2	"	"	"	- 2	"
Gonorrhœa ..	"	560	259	412	130	- 148	- 129
Other diseases, not venereal ..	"	1,130	395	644	350	- 486	- 45
Total ..	"	1,940	831	1,347	691	- 593	- 140
Total attendances of all cases		52,676		47,331		- 5,345	
Aggregate No. of In-patient days ..	"	1,337		1,377		+ 40	
No. of doses of salvarsan substitutes ..	"	11,597		9,061		- 2,536	
Pathological specimens examined :—							
Spirochetes ..	"	165		6		- 159	
Gonococci ..	"	12,274		6,667		- 5,607	
Other organisms ..	"	3,774		3,529		- 245	
Blood—Wassermann reaction ..	"	11,726		12,570		+ 844	

PERSONS TREATED AT THE GENERAL INFIRMARY AT LEEDS
(LOCAL TREATMENT CENTRE).

		Syphilis		Soft Chancre.		Gonorrhœa.		Other Diseases not venereal.	
		M.	F.	M.	F.	M.	F.	M.	F.
Under observation and treatment, 1st January, 1947 ..		1,093	870	1	"	504	246	312	215
Added to register during year		473	308	"	"	586	177	1,005	435
Discharged as cured ..		118	80	1	"	386	228	896	415
Died ..		8	12	"	"	"	"	"	"
Transferred ..		100	60	"	"	65	25	57	13
Under treatment on 31st December, 1947 ..		1,231	986	"	"	441	116	363	222
Defaulters ..		143	73	"	"	199	55	"	"
*No. of attendances ..	{(a)}	16,792	13,846	3	"	6,652	2,331	8,412	2,061
	{(b)}	2,882	876	"	"	1,459	369	2,252	814

*{(a)} For medical consultations and treatment.
*{(b)} For intermediate treatment.

PATHOLOGICAL WORK

	MICROSCOPICAL.		Cultures for Gonorrhœa.	SEROLOGICAL		C.S.F.
	Syphilis.	Gonorrhœa		Syphilis.	Gonorrhœa.	
Examined at Treatment Centre ..	828	3,496	..	..	..	..
Sent to Laboratory ..	..	910	5,873	16,612	1,063	950

STATEMENT SHOWING THE SERVICES RENDERED AT THE TREATMENT CENTRE DURING THE YEAR, CLASSIFIED ACCORDING TO THE AREA IN WHICH PATIENTS RESIDED.

	Syphilis.	Soft Chancre	Gonorrhœa.	Non-Venereal, Undiagnosed Conditions.	Total.	Total No. of Attendances.
Leeds ..	502	..	542	994	2,038	47,331
Barnsley ..	1	..	1	1	3	28
Bradford ..	2	..	3	8	13	203
Dewsbury ..	..	..	..	4	4	121
Doncaster ..	2	..	..	2	4	64
Halifax ..	1	..	..	1	2	36
Huddersfield ..	..	..	2	1	3	57
Hull ..	1	..	2	3	6	94
Sheffield ..	2	..	..	..	2	19
Wakefield ..	3	..	7	5	15	220
York ..	..	..	..	..	..	78
N. Riding, Yorks.	1	..	1	1	3	32
W. Riding, Yorks.	133	..	126	413	672	10,197
Lincolnshire ..	1	..	..	..	1	5
London ..	..	..	1	..	1	2
Liverpool ..	1	..	..	..	1	10
Newcastle ..	..	..	2	..	2	5
Home Office ..	..	..	1	2	3	247
Totals ..	650	..	688	1,435	2,773	58,749

Venereal Diseases

BY

ROBERT LEES, M.D., M.B., Ch.B., F.R.C.P.

Venereal Diseases Officer.

Incidence of Diseases.—This showed a decline compared with 1946 which was the peak of the wartime "epidemic."

New cases attending the clinic totalled 2,983, and of these 2,063 were males and 920 were females.

The total number of cases of syphilis attending for the first time was 650 and of these 437 were early infections acquired within the previous year.

Cases of gonorrhoea totalled 688 (531 being males and 157 females). It is of interest to note how the total cases of gonorrhoea and syphilis are approximately equal. In most localities gonorrhoea outnumbers syphilis in the ratio of 3 to 1.

It is difficult to explain the high incidence of syphilis compared with gonorrhoea in this locality. In part this may be explained by the very rapid control of contagion in cases of gonorrhoea, which is almost invariably effected within 24 hours, by the use of penicillin and sulphonamides, the proportion of contagious relapses being very few. Accordingly, spread throughout the community by cases of gonorrhoea under treatment and observation has almost ceased. On the other hand, penicillin treatment of syphilis has now been recognised to be associated with a fairly high proportion of contagious relapses. This is not yet fully understood either by the medical profession or lay public; and many patients who have received a little treatment, with disappearance of the early signs of disease, consider that they are cured. The signs of these contagious relapses are often inconspicuous and the patient may spread the disease whilst firmly persuaded that he had been cured by the panacea, penicillin.

The trend of the incidence in venereal diseases over a period of years has been very markedly increasing during the war years after 1940. This appears to have reached its peak in 1946, and 1947 marks the beginning of a decline in the wartime high incidence. A rapid

reduction in incidence is not to be expected, but a steady and gradual diminution in the number of early cases will almost certainly occur. It may be ten years before the incidence of syphilis falls to the level observed in 1939.

Sources of Infection.—Analysis of the source of infection in early cases shows that there has been a reduction of infection from street-walking prostitutes in Leeds.

Very few cases were received in 1947 who had been infected just prior to demobilisation from B.A.O.R. A small number of ex-Service patients reported for continuation of treatment and observation.

It was feared for a time that the "displaced persons" camps would provide a considerable number of cases, but in this area the number of such patients has been small.

In every contagious case an effort is made to trace the source of the disease and subsequent contacts. In about 50 per cent. of the women this is done successfully but it has not been possible to achieve this in men as their consort has been "picked up" in a bar or at a dance hall and cannot be traced.

Diagnostic Methods.—No change has been made in the methods of diagnosis of gonorrhoea.

Considerable use has been made of the consultative facilities afforded by the Ministry of Health Reference Laboratory for the elucidation of problems relating to serological diagnosis of syphilis. These facilities have been helpful in cases of doubtful etiology, especially in pregnancy, and in relapses during treatment of syphilis. It is considered that there is a definite place for quantitative serological technique in the control of the treatment of syphilis; such methods are in routine use in America and also in many centres in Britain.

Treatment Methods.—During the year clinical trials of different treatment systems have been evolved, and it is felt that progress has been made towards finding a safe system which will give a very high percentage of cures in a short time. The reduction of the time period is important, for many venereal diseases patients are irresponsible and stupid and for a variety of reasons discontinue treatment before being cured.

Gonorrhoea has been treated by penicillin and sulphonamides given simultaneously ; and even if the patient pays only a single visit to the centre it is probable that cure is affected, for the analysis of results shows a primary cure rate of over 90 per cent. and in some series it approaches 100 per cent.

Early syphilis is treated by a system which combines penicillin, neoarsphenamine (or mapharside) and bismuth ; in the first ten days of treatment a very intensive treatment is adopted. This is likely to control contagious lesions very rapidly, and it may produce a high percentage of cures even if the patient has no further treatment. Full advantage is taken of the synergic action of the three drugs. Many of the early contagious cases are admitted to hospital for ten days to ensure that this treatment is completed, and to minimise the risk to the community. Grateful acknowledgement is made of the invaluable help from the medical and nursing staffs of Seacroft and St. James's Hospitals.

The toxic effects which might attend such intensive systems have been very few and easily controlled, apart from one case of encephalopathy in a pregnant woman treated for secondary syphilis in the last month of her pregnancy. " Herxheimer " reactions have been few and slight ; dermatitis and other complications of arsenical treatment have been few and responded rapidly to treatment, especially effective being the drug " B.A.L. " which is now readily available.

Syphilis of the Cardiovascular and Nervous System.—During 1947 investigation and treatment of a considerable number of late cases of syphilis involving the heart, aorta, brain or spinal cord were investigated and treated. Many such cases were referred to us by general practitioners and the rest were seen in consultation with the staff of the General Infirmary and St. James's Hospital.

It is felt that such cases should be the responsibility of the Consultant on Venereal Disease and that he should be given full facilities for their treatment. They are long-term cases requiring observation for years, and also the families of such patients require investigation in co-operation with the family medical advisor. The Venereologist has generally better facilities than a general physician for prolonged follow-up and for investigation of the family ; and probably he has more extensive experience of the therapeutics of syphilis than the average physician.

Appropriate treatment for such cases can reduce invalidism and suffering and can prolong life considerably. General hospital beds with good nursing and excellent laboratory facilities are essential for this work. During the year 49 male cases were admitted to St. James's Hospital and 96 cases were treated in the General Infirmary. In addition a number were treated in hospitals under the control of the West Riding County Council, and we are grateful for the ready co-operation of their medical staffs.

An interesting group of cases of early general paralysis of the insane and also other types of syphilis of the nervous system have been treated by malaria inoculation and penicillin in large dosages. The results are being prepared for publication in the medical press and they appear very satisfactory. No deaths occurred in the series and a high proportion of successful results were achieved.

Venereal Disease in Pregnancy.—During 1947 there was a further increase of the work done in conjunction with the ante-natal department of the Maternity Hospital. Most of the work has been consultative, especially concerning patients of the Maternity Hospital in whom clinical or serological evidence of syphilis has been detected on routine ante-natal examination. Pregnant women attending the Venereal Diseases Clinic at the Infirmary are also transferred to the Maternity Hospital for treatment and observation. So far as possible every syphilitic expectant mother is treated with 5 mega-units of penicillin and this followed by ten weekly injections of neoarsphenamine and bismuth. Patients numbering 34 were admitted for a course of penicillin and during the year there were 15 live births, one stillbirth and three miscarriages in this group. One mother and her baby died during treatment. The remainder were under treatment at the end of the year.

Arrangements are made for the careful follow-up of all such cases, their babies having serological, clinical and X-Ray examination done when aged 3 months. The babies will be kept under regular observation for at least two years, and if possible for five years, to ensure that the pre-natal treatment has prevented inherited syphilis.

In addition to syphilis a number of cases of leucorrhœa are investigated. Most of these are due to trichomonas vaginalis or yeasts.

MATERNITY HOSPITAL, 42, HYDE TERRACE.

	Cases in residence on Dec. 28th, 1946.	Cases admitted.	Cases discharged.	Cases in residence on Jan. 3rd, 1948.
Syphilis ..	3	45	48	..
Gonorrhœa ..	..	..	..	..
Syphilis and Gonorrhœa ..	..	1	1	..
Other disease ..	..	..	..	..
Total ..	3	46	49	..

Total days in residence 208
 No. of doses of salvarsan substitute .. 23

Pathological specimens examined :—

Blood—Wassermann reaction.. .. 46
 Other organisms 4

HOPE HOSPITAL, 126, CHAPELTOWN ROAD.

	Cases in residence on Dec. 28th, 1946.	Cases admitted.	Cases discharged.	Cases in residence on Jan. 3rd, 1948.
Syphilis ..	10(+1)	22(+3)	21(+3)	11(+1)
Gonorrhœa ..	2	8	5	5
Syphilis and Gonorrhœa ..	1	1	2	..
Others ..	..(+1)	1(+13)	1(+9)	..(+5)
Total ..	13(+2)	32(+16)	29(+12)	16(+6)

Total days in residence 4,847 (+1,747)
 No. of doses of salvarsan substitute .. 200

Pathological specimens examined :—

Spirochetes —
 Gonococci.. 220
 Other organisms 8
 Blood—Wassermann reaction.. .. 106

Of the 32 women admitted, 16 had babies, shown in the above table in the brackets.

Hope Hospital.—This Hospital has been active during the year. The social re-education of the patients has been developed actively and it is felt that the majority of those treated will be successful in obtaining and holding a useful and happy place in society in the future. Every effort is made to assist the women to find suitable employment and to maintain an unobtrusive supervision so that timely help and advice can be given lest they be tempted to return to an irregular mode of life or prostitution. Many Church and Social Service agencies and voluntary workers give invaluable assistance in the re-education of the patients.

The table on page 54 gives details of the cases admitted to and treated in the Maternity and Hope Hospitals.

Social Services.—During the latter part of 1947 an assistant Lady Almoner was appointed and this has enabled us to undertake a more intensive search for the sources of infection and contact cases. Great attention has also been given to the prevention of "early default," that is the cessation or interruption of treatment while the patient may be still contagious or uncured. Default during the period of observation is less serious but it also undesirable as a proportion of cases relapse. It is felt that this work is of great value to the community in preventing spread of disease and serious late effects of uncured infection.

There is need, provided a suitable man could be found, for a social worker to trace male patients and male contacts.

Premises and Equipment.—No alteration of the clinic premises has yet been made and work is done under very poor conditions, imposing hardship on the staff and depriving the patients of privacy and involving unnecessary risk.

The equipment has been improved, in part by the expenditure of a grant of £200 made by the University of Leeds for provision of equipment and apparatus to be used for teaching.

Teaching and Research.—This is an important part of the work of the Department. In addition to undergraduate teaching, the Department has undertaken post-graduate demonstrations and lectures, training of ex-Service specialists, and also the teaching of nurses, midwives and health visitors.

Leeds City General Hospitals

BY

W. MCINTOSH, M.B., Ch.B.

Medical Director.

ST. JAMES'S HOSPITAL (SOUTH).

The number of patients of all categories admitted to hospital and the total treated are shown in the following table, together with the numbers of discharges and deaths, and of patients remaining at the end of the year :—

	Men.	Women.	Children.	Total.
Remaining in hospital on 31st December, 1946	308	473	158	939
Admitted during 1947	3,760	6,407	1,428	11,595
Children born during 1947 ..	..	..	1,511	1,511
Total admissions and births ..	3,760	6,407	2,939	13,106
Total number treated during 1947	4,068	6,880	3,097	14,045
Discharged during 1947	3,216	5,960	2,802	11,978
Deaths	553	492	150	1,195
Total discharges and deaths ..	3,769	6,452	2,952	13,173
Remaining in hospital on 31st December, 1947	299	428	145	872

The total number of admissions and births rose by 472, and 1,195 patients died in hospital—a decrease of 121 over the previous year. The number of Service cases admitted to the Plastic and Maxillo-Facial Unit again showed a reduction, the total being 140 as compared with 191 in 1946.

Medical.—During the year the nursing staff situation made it impossible to open the empty medical wards, so that throughout the whole period under review Ward 29 and part of Ward 33 remained unoccupied. The turnover of patients was speeded up in the wards in use and this was facilitated to a considerable extent by the developments at St. James's Hospital (North) which are described later.

The Medical Professorial Unit, which occupies Wards 2, 3, 4 and 5, continued to play an important part on the medical side of the hospital.

Surgical.—On the surgical side an increase in the number of major operations occurred. The figure for 1947 was 4,191, an increase of 300 on the previous year. In addition 539 minor operations were performed. These figures include 950 operations performed in the Plastic and Maxillo-Facial Unit which continued to treat cases from a wide area.

Very important work was also carried out in the Prostatic Surgical Unit which continued to play a valuable part in the services provided by the hospital.

Children's Wards.—In the children's wards the admissions numbered 1,428, and 84 deaths were recorded. The only wards open during the year were Nos. 23 and 24, i.e., the ground floor of "K" Block, and Ward 6. Wards 23 and 24 continued to form part of the University Teaching Unit under Professor W. S. Craig. The ward at Cookridge Hospital for the accommodation of long-stay children was a valuable annexe, 83 cases being transferred to it from St. James's Hospital during the year. Several minor epidemics, e.g., measles, occurred during 1947.

Midwifery and Gynaecology.—The number of confinements carried out was 1,554, a decrease of 120 on the previous year. This decrease was due to the fact that one of the lying-in wards remained closed throughout 1947 on account of the shortage of pupil midwives.

Six maternal deaths occurred, the causes of death being :— congestive heart failure 3, asphyxia following Caesarian Section 1, ruptured uterus 1, and septicaemia 1. There were 76 stillbirths and 54 infants died within ten days of birth, the cases being as shown below :—

STILLBIRTHS.

Syphilis ..	..	..	..	..	..	4
Prematurity ..	..	..	..	..	..	6
Toxæmia ..	..	..	..	..	..	9
Ante-Partum foetal death in uterus ..				..		6
Intra-Partum death ..	..	..	..	..	..	5
Anencephaly ..	..	..	..	..	..	7
Hydrocephaly ..	..	..	..	..	..	6
Accidental Hæmorrhage ..	..	..	..	..	..	5
Placenta Prævia ..	..	..	..	..	..	3
Prolapse of Cord ..	..	..	..	..	..	5
Cord round neck ..	..	..	..	..	..	3
Difficult Breech Delivery ..	..	..	..	..	..	5
Face Presentation ..	..	..	..	..	..	1
Transverse Lie ..	..	..	..	..	..	2
Difficult Labour due to large foetus ..				..		3
Prolonged Labour ..	..	..	..	..	..	6
						—
Total ..				..	76	
						—

NEO-NATAL DEATHS.

Prematurity ..	..	..	..	..	..	37
Atelectasis ..	..	..	..	..	..	4
Bronchial Pneumonia ..	..	..	..	..	..	2
Congenital Deformity ..	..	..	..	..	..	5
Intra-cranial Hæmorrhage ..	..	..	..	..	..	4
Erythroblastosis ..	..	..	..	..	..	1
Septicæmia ..	..	..	..	..	..	1
						—
Total ..				..	54	
						—

The Ante-Natal Clinic was attended by 1,424 new cases. Altogether there were 9,805 attendances at the Ante-Natal Clinic and 797 at the Post-Natal Clinic.

Psychiatry—The statistics for this Department are recorded in the following table :—

		Men	Women	Total
Remaining in hospital on 31st December, 1946	.. .. ..	63	105	168
Admissions :				
From outside	.. .. ..	167	288	455
Transferred from hospital general wards	.. .. ..	31	75	106
Transferred from other hospitals or institutions	.. .. ..	5	..	5
Total admissions and transfers	..	203	363	566
Discharges :				
To Mental Hospital as certified cases		47	132	179
To Mental Hospital as voluntary patients	.. .. ..	23	45	68
To Mental Hospital as temporary patients	.. .. ..	1	14	15
To Mental Deficiency Authorities	..	2	2	4
To hospital general wards	..	14	45	59
To other Institutions	.. .. ..	20	2	22
Discharged home	.. .. ..	72	99	171
Total discharges	.. .. ..	179	339	518
Died	.. .. .. ..	22	22	44
Remaining in hospital on 31st December, 1947	.. .. ..	65	107	172

There was an increase of 70 in the total number of admissions compared with 1946. The number of patients admitted from their homes increased and there was also a considerable increase (51 patients) in the number of cases transferred from the general wards. This would appear to indicate a tendency for more use to be made of the Psychiatric Section by other departments of the hospital for observation and assessment of cases who are not necessarily thought to require to go to Mental Hospital. It is hoped that this aspect of the work will develop further when permission is obtained to accept patients in these wards on a voluntary basis. It is hoped that next year it will be possible to provide beds for a psychiatric "Early Treatment" Unit, into which patients would come voluntarily for the special electrical and other treatments which are at present only obtainable in Mental Hospitals. This Unit would

be staffed by the Professor of Psychiatry at Leeds University and his assistants. The Mental Observation Section for the reception of acute cases of mental disorder would continue in another part of the building.

The work of the present department is still greatly handicapped by the necessity of nursing mentally defective children and adults who are awaiting accommodation in the Meanwood Colony. There, patients take up the work of the nursing staff whom it is desired to employ with the more acute patients who would benefit by being looked after in separate wards rather than in unclassified single wards as at present.

The number of patients permanently resident (certified under Section 24 of the Lunacy Act, 1890) and of those awaiting beds in Meanwood Colony is shown below :—

	Males	Females	Total
31st December, 1947 : On permanent detention (Section 24 of the Lunacy Act, 1890) ..	41	73	114
Awaiting accommodation at Meanwood :—			
Adults	6	12	18
Children	16	4	20
Total	63	89	152

It is highly desirable for the status of this Department of the hospital and, indeed, essential for the success of the proposed "Early Treatment" Unit, that other accommodation should be found for these patients.

Radiology.—During 1947, 7,402 patients were X-Rayed, an increase of 1,799 over the figure for the previous year. Of these 611 were screened, as compared with 483 in 1946. The number of examinations by the portable unit amounted to 430. During the year 30 cases from the Leeds Herzl Moser Hospital were dealt with in the Department.

The amount of work undertaken by the Department during 1947 was materially assisted by the acquisition of a third X-Ray plant which was obtained from Seacroft Hospital, while an increase in technical staff has also facilitated the increase in turnover.

Physiotherapy.—A large increase in the number of treatments carried out in this Department was registered during the year, the total being 58,535 compared with 49,337 in 1946.

New in-patients numbering 919 were treated, an increase of 123 on the 1946 figure, while the number of new out-patients was 492. Out-patient attendances totalled 10,412.

The physiotherapy administered to the maternity patients at St. Mary's Hospital is described in the section dealing with that hospital.

Routine ward classes were begun on the orthopædic and post-natal wards and pre- and post-operative breathing exercises on the surgical wards. Post-operative thoracoplasty chest cases from Killingbeck and chest cases referred from the Health Clinic are now being treated.

In October ante-natal classes were started at St. James's Hospital and a day and night service is planned.

Pathology.—During 1947 the routine clinical investigations totalled 23,573, an increase of 6,743 on the figure for 1946.

Hæmatological investigations increased from 3,872 in 1946 to 6,164 in 1947. The work of blood grouping rose to 3,155 investigations as compared with 2,486 during 1946.

A new record was set up in the autopsy practice, with a total of 505 cases. The figure for 1946 was 402.

Dr. Polson, who had been Pathologist to the hospital since 1931, resigned in September in order to take up his appointment as Professor of Forensic Medicine in the University of Leeds. He will be succeeded by Dr. W. Goldie, who is due to take up duty on 1st January, 1948. By arrangement with Professor Stewart, the work was carried on during the interim period by Dr. C. J. E. Wright, Lecturer in Pathology in the University of Leeds.

Staff.—Dr. A. A. Driver took up duty as Deputy Medical Superintendent in January, 1947. Mr. D. B. Feather took up duty as whole-time surgeon in April, 1947. Dr. M. R. Tomlinson was appointed full-time Radiologist in October, 1947, under the scheme provided for by the Ministry of Health Circular No. 202/46.

The Medical Faculty held one special meeting and six ordinary meetings during the year. At the Annual General Meeting in November, 1947, Dr. D. W. Currie was unanimously elected to the Chair in place of Dr. J. Johnstone Jervis.

There was a gradual reduction in the number of ex-Service Registrars under the Ministry of Health scheme for the post-graduate education of demobilised medical officers. During the year six of these have held supernumerary posts, while one held a post on the approved establishment of the hospital.

Mr. G. Capes took up appointment as Catering Officer on 1st September, 1947.

Nursing Staff.—The number of students who entered the Preliminary Training School was 70 and 51 of these were accepted for training. The number of nurses in training at 31st December, 1947, was 137 (127 female and 10 male). This represents a slight improvement on the position in the previous year but there is still a 40 per cent. deficiency on the establishment of 230 student nurses.

In the Preliminary State Examinations 54 per cent. of the candidates passed Part 1 and 87 per cent. Part 2. In the Final State Examinations 77 per cent. passed.

The results of the Central Midwives Board Examination (Part 1) show that 23 students out of 30 (77 per cent.) were successful at their first attempt, while 4 out of 7 re-entrants passed.

The Nurses' Representative Council continued to meet during the year and made several valuable suggestions, which were adopted by the Committee.

General.—The main feature of the year was the continued acute shortage of nursing staff which limited the amount of work which the hospital is capable of undertaking.

One of the urgent needs of the hospital is the provision of additional and more desirable quarters for the Resident Medical Staff.

During the year the kitchens on several of the wards were modernised by the removal of the kitchen ranges and the provision of gas cookers, together with new washing-up facilities. At the same time sluices on these wards were renewed and bed-pan sterilizers were installed. While the work was in progress the fire-places in the middle of the ward floors were removed.

ST. JAMES'S HOSPITAL (NORTH).

The following table shows the number of admissions, discharges and deaths during the year 1947 :—

	Men	Women	Children	Total
Remaining in Hospital on 31st December, 1946	154	167	1	322
Admitted during 1947	407	248	19	674
Total number treated during 1947	561	415	20	996
Discharged during 1947	180	84	11	275
Deaths during 1947	227	181	..	408
Total discharges and deaths	407	265	11	683
Remaining in Hospital on 31st December, 1947	154	150	9	313

The admissions showed an increase of 146 during the year, while the deaths which numbered 408 showed an increase of 35 on the figure for the previous year.

In July, 1947, the hospital was approved by the General Nursing Council as a Training School for Assistant Nurses. In September, 1947, the Nurses' Home was completed and became available and a Nurses' School was set up. Two courses have been held since the School was opened.

Early in the year an Intensive Training Course for ex-Service Nursing Orderlies was started on the upper floors of Block 4. This Course was under the auspices of the Ministry of Health and 41 students underwent training. It was so successful that at the end of twelve months 35 of them had qualified as State Registered Nurses. The practical nursing which these students undertook in the hospital was of considerable assistance to the over-worked regular staff.

During the year a male dermatological ward was opened in Ward 53, while a children's ward was provided in Ward 51. These innovations increased the value of the hospital and provided a valuable stimulus to the nursing staff who had previously dealt only with chronic patients.

Towards the end of the year a start was made on the process of converting the first floor of Block 3 into wards,

The Laundry has washed 2,285,988 articles, an increase of 297,119 over the figure for last year. In view of the obsolete equipment this is a fine achievement.

Nursing Staff.—The total number of nurses at 31st December, 1947, was still about 20 per cent. below the accepted establishment for the number of beds in use. Details of staff at the end of 1947 are :—

- 10 Female Trained Nurses (including administrative staff and 2 part-timers).
- 36 Enrolled Assistant Nurses (including 4 part-timers).
- 2 Female Intermediate Assistant Nurses.
- 11 Pupils Assistant Nurses.
- 1 Male Tutor.
- 2 Male Trained Nurses.
- 39 Male Enrolled Assistant Nurses.
- 4 Male Intermediate Assistant Nurses.
- 1 Male Pupil Assistant Nurse.

The Nurses' Representative Council has continued to meet each month and has made valuable suggestions which have been adopted.

Canteen.—A canteen for the use of non-resident staff was opened in August, 1947.

ST. MARY'S HOSPITAL.

On 28th July, 1947, the City Council passed a resolution that St. Mary's Infirmary should be re-named St. Mary's Hospital, as it is now the largest maternity hospital in the city and more active medical treatment of the chronic sick has been instituted.

The following table provides statistics in relation to admissions and discharges during the year :—

	Men	Women	Children	Total
Remaining in Hospital on 31st December, 1946	29	116	29	174
Admitted during the year	146	2,496	51	2,693
Live births .. ..	..	..	1,953	1,953
Total admissions and births ..	146	2,496	2,004	4,646
Total treated during 1947 ..	175	2,612	2,033	4,820
Discharged during 1947 ..	84	2,393	1,948	4,425
Died during 1947 ..	66	70	28	164
Total discharges and deaths ..	150	2,463	1,976	4,589
Remaining in Hospital on 31st December, 1947	25	149	57	231

The average number of patients, excluding babies, during 1947 was 171. The highest number of beds occupied was 190 and the lowest 146.

Maternity Department.—In 1947 considerable progress was made in the extension of the maternity services in the hospital. Beds numbering 28 were re-opened on 3rd January and provided labour wards and lying-in ward accommodation. On 3rd May a further 16 beds were opened on "A" Block as a ward for ante-natal cases. These additions brought the total number of maternity beds up to 96. The number of bookings was correspondingly increased and there was a high record of 2,347 admissions to the Maternity Department, 1,998 births and 592 ante-natal admissions. It is interesting to review the increase in the work done in this Maternity Unit since 1944. The following table shows the steady rise in the number of live births.

	1944	1945	1946	1947
No. of live births	806	1,282	1,544	1,953

The maximum number of admissions has not yet been reached as the Isolation Bungalow has not been utilised.

The Operating Theatre also came into use in January. Ten Caesarian Section operations and two other major abdominal operations were performed during the year.

There has also been an increase in the number of Ante-Natal Clinics held. An extra session has been required each week. The number of patient-attendances has correspondingly increased both in the Ante-Natal and the Post-Natal Clinics, as shown in the following table :—

	Ante-Natal Clinic		Post-Natal Clinic	
	1946	1947	1946	1947
Clinics held	206	258	46	51
No. of patients attended ..	2,746	3,884	598	777
No. of attendances ..	13,719	15,536	609	792

There were no maternal deaths during the year and the number of stillbirths and neo-natal deaths was almost the same as in 1946 in spite of the increased number of deliveries. Details of abnormalities, stillbirths and infants dying within 10 days of birth are given below :—

ABNORMALITIES :

Born before admission	..	..	..	..	..	51
Triplet Pregnancy	..	..	..	..	..	1
Twin Pregnancy	..	..	..	..	..	23
Forceps deliveries	..	..	..	..	..	79
Stillbirths	..	..	..	..	..	45
Breech Deliveries	..	..	..	..	..	28
Face Presentations	..	..	..	..	..	12
Prolapsed Cord	..	..	..	..	..	5
Manual Removal of Placenta	..	..	..	..	..	17
Post-Partum Hæmorrhage	..	..	..	..	..	27
Ante-Partum Hæmorrhage	..	..	..	..	..	15
Eclampsia	..	..	..	..	..	8

STILLBIRTHS :

Anencephalic Monster	..	..	..	..	..	5
Hydrocephalus	..	..	..	..	..	1
Prematurity	..	..	..	..	..	3
Atelectasis	..	..	..	..	..	2
Maternal Toxæmia	..	..	..	..	..	4
Maternal Toxæmia—Macerated foetus	..	..	..	..	..	11
Ante-Partum Hæmorrhage	..	..	..	..	..	7
Difficult Labour	..	..	..	..	..	10
Placental insufficiency	..	..	..	..	..	1
Macerated Rh—	..	..	..	..	..	1
						45

NEO-NATAL DEATHS :

Prematurity	..	..	..	..	..	15
Atelectasis	..	..	..	..	..	4
Cerebral Hæmorrhage	..	..	..	..	..	2
Congenital Heart Disease	..	..	..	..	..	1
Supra-renal Hæmorrhage	..	..	..	..	..	1
Spina Bifida	..	..	..	..	..	1
Anencephalic Monster	..	..	..	..	..	1
						25

The lack of isolation facilities is still acutely felt, for, in spite of the improved staffing position, it has not been possible to allocate sufficient midwives to staff the Isolation Bungalow. It has been decided to use the Bungalow as an Ante-Natal Clinic and to use the present Clinic for an observation (isolation) ward. This will provide

more beds than would be provided in the Bungalow and will be more economical in staff. Minor structural alterations are proceeding. It is hoped that next year it will be possible to extend these facilities by providing cubicles and by converting one of the annexes into an isolation labour ward and theatre. It is also planned to provide a new central sterilizing room when the new sterilizing equipment, now required for both "A" and "B" Blocks, is installed. Other alterations, which will complete the re-organisation of the maternity unit aim at providing a better first-stage ward for "A" Block, a surgeon's room near "B" Block theatre and an X-Ray room with the necessary annexes.

Mr. Herbert Agar, F.R.C.S., M.R.C.O.G., was appointed second Consultant in September, 1947, and the number of Resident Medical Officers was increased to four. The two Senior Resident Medical Officers, Dr. M. J. Twomey and Dr. K. A. McDonald, obtained the Diploma in Obstetrics of the College of Obstetricians and Gynaecologists, London. The junior posts have been held by Dr. N. R. Murdoch and Dr. R. Worsley.

Miss M. E. Stansfield, who had been Matron since 1927, retired on 10th April, 1947, and Miss J. E. Gordon succeeded her. Miss P. Wordsworth was appointed Deputy Matron on 1st August, 1947, in succession to Miss J. S. Mitchell. Miss E. Baxter has come as temporary midwifery teacher and she and Miss Wordsworth conduct the pupil midwives' theoretical course. It has been possible to start the system of "study-days," i.e., days on which pupils are free from ward work for theoretical tuition and the presentation of this fact in our advertisements seems to have resulted in a much larger number of applications from potential pupil midwives. The number of pupils who passed Part I of the Central Midwives' Board Examination during the year was 36 and the available accommodation for pupils is fully occupied.

Two physiotherapists were appointed in September and have conducted post-natal exercises in the wards as well as classes on relaxation methods among the patients during the ante-natal period. This instruction, explaining the course of a normal labour and the practice of relaxation, accompanied by suitable exercises, is designed to help the expectant mother to avoid the fear and tenseness of muscles which may prolong an otherwise normal labour. A patient instructed in and successfully practising this method can be confi-

dently expected to have a more natural delivery. The physiotherapists continue their instruction of patients in the labour room, where they co-operate with the midwives. At the same time gas and air analgesia and other pain-relieving facilities are available.

Geriatric Work.—“*Geriatrics*,” or the medical care of the aged, has become recognised as a branch of social medicine which deserves special study. The proper care of the aged in hospital requires, in addition to good medical and nursing attention, the proper classification of patients, in order that those in similar physical and mental states can be nursed together. The new patient should not be put in the first vacant bed but should go to a selection ward where he can be assessed before being transferred to a ward of patients suffering from similar conditions.

A Selection Unit of this type was established at St. Mary's Hospital in June and the remainder of the chronic sick accommodation there, together with that at St. George's and Cookridge Hospitals, was classified. Wards were set aside for the treatment of the young chronic sick—a relatively small group. The aged who needed prolonged treatment with the help of physiotherapists were nursed at St. Mary's Hospital, those who were more chronic but able to use day-rooms and walk outside were sent to wards with appropriate facilities, and those with mental confusion or incontinence due to old age were nursed together. As a result of these arrangements the number of admissions to St. Mary's Hospital shows a considerable increase. The death rate is high among these patients, as many of them arrive in a neglected state.

With this method of classification it is easier than previously to analyse the results of admissions to hospital. Of 188 patients over 65 years of age who were admitted to the Selection Unit between 1st July and 31st December, 1947, 39 were discharged recovered, seven recovered but were awaiting hostel accommodation, nine were expected to recover, 14 were discharged to other hospitals and 74 died. This means that a total of 143 or 76 per cent. were discharged or died without entering the true chronic wards; only 45 out of the 188 required prolonged hospitalisation.

It is expected that the Selection Unit will later operate at St. James's Hospital (North), where diagnostic facilities are more easily available.

ST. GEORGE'S HOSPITAL.

Many of the wards at this hospital are small and have day-rooms attached and give easy access to the grounds. They are thus admirable for the grouping together of patients who have similar nursing requirements. The scheme for re-decorating in brighter colours has been completed and the bed lighting has been improved in several wards.

One small ward of four beds has been reserved for homeless mothers and babies sent by the Social Welfare Department, and 18 mothers and 19 babies have been admitted and discharged during the year. Admission of male tuberculous patients ceased on 31st January, 1947, but female patients continue to be admitted to the 33 beds under the clinical supervision of the staff of the Tuberculosis Committee.

Admission and discharge statistics for the hospital are shown below :—

	Men		Women		Total	
	Chronic.	T.B.	Chronic.	T.B.	Chronic.	T.B.
Remaining in Hospital on 31st December, 1946	45	9	173	26	218	35
Admitted during 1947 ..	129	12	83	58	212	70
Total Number treated during 1947	174	21	256	84	430	105
Discharged during 1947 ..	50	16	26	43	76	59
Deaths during 1947	61	5	58	11	119	16
Total discharges and deaths	111	21	84	54	195	75
Remaining in Hospital on 31st December, 1947	63	..	172	30	235	30

The highest number of beds occupied during the year was 283.

The building allocated for use as a school for assistant nurses was completed and equipped during the year. The hospital, after inspection by representatives of the General Nursing Council, was recognised as a parent School for training assistant nurses. Pupils will spend most of their time at St. George's Hospital, but will go to Cookridge Hospital for experience in the nursing of children.

The canteen for the use of non-resident domestic employees is ready, except for kitchen equipment.

COOKRIDGE HOSPITAL.

The following statistics indicate the scope of the work done during the year :—

	Women		Children
	Chronic	Convalescent	
Remaining in Hospital on 31st December, 1946	77	..	6
Admitted during 1947	32	90	85
Total Number treated during 1947 ..	109	90	91
Discharged during 1947	20	83	83
Deaths during 1947	11	..	..
Total discharges and deaths ..	31	83	83
Remaining in Hospital on 31st December, 1947	78	7	8

One small ward has been set aside for the use of female convalescent patients from St. James's Hospital. The facilities provided for convalescent children have proved a useful addition to the hospital services of the city.

Mental Health Services

BY

J. SQUIRE HOYLE,
Executive Officer.

Statistics.—The number of mentally defective persons on the registers on 31st December, 1947, was 1,915, comprising 1,808 statutory cases, i.e., "subject to be dealt with" under the Act, and 107 voluntary cases. The following tables show the number of cases and the method of treatment :—

TOTAL UNDER CONTROL OR SUPERVISION ON 31.12.47

	Males		Females		Total
	Over 16	Under 16	Over 16	Under 16	
Certified Institutions :					
Meanwood Park Colony and "Crooked Acres" Annexe :—					
(a) Under Order	220	39	358	32	649
(b) Placed by Parent (Section 3)	2	5	1	4	12
(c) Place of Safety .. ..	..	1	..	..	1
Mid-Yorkshire Institution :—					
(a) Under Order	117	..	..	..	117
Non-provided Institutions :					
Royal Albert	3	..	..	..	3
" " placed " (Section 3)	3	1	6	..	10
Mary Dendy Home .. ..	..	..	1	..	1
Stoke Park Colony	4	..	3	..	7
Old Rectory .. ..	..	..	3	..	3
Stallington Hall	8	..	12	..	20
Durran Hill House .. ..	..	..	4	..	4
Etloe House .. ..	..	..	1	..	1
Whittington Hall .. ..	..	..	4	..	4
Besford Court .. ..	..	2	..	..	2
Royal Fort .. ..	..	..	2	..	2
Ellen Terry Home .. ..	..	1	..	..	1
St. Elizabeth's Home .. ..	..	..	1	..	1
Princess Christian's .. ..	..	1	2	..	3
Under Guardianship	359	48	398	36	841
" placed " (Section 3)	13	..	20	1	34
Under Statutory Supervision .. ..	..	..	1	..	1
Under Voluntary Supervision	342	127	308	121	898
St. James's Hospital :—					
(a) Parent's request .. ..	..	1	..	..	1
(b) Place of Safety	6	14	10	4	34
Other Cases	5	..	..	..	5
Total 1947	771	201	778	165	1,915
Total 1946	976	196	948	153	2,273

ADMISSIONS AND DISCHARGES

Particulars	No. on Register 1.1.47	Admiss- ions during year	Removals during year	No. on Register 31.12.47
Meanwood Park Colony ..	676	10	25	661
Mid-Yorkshire Institution ..	123	1	7	117
Non-provided Institutions ..	59	7	4	62
Guardianship	41	..	6	35
" Place of Safety "	17	33	15	35
Supervision :				
Statutory	1,181	56	339	898
Voluntary	159	9	67	101
St. James's Hospital	14	1	14	1
Public Assistance Committee Institution	3	2	..	5
Total	2,273	119	477	1,915

The admissions to institutions have been fewer than usual owing to lack of accommodation and staffing difficulties, and the "waiting list" has grown until there are now 81 cases for whom petitions will have to be presented as soon as accommodation is available.

Supervision.—The Committee's Report for the year 1944 refers to 286 cases in the Statutory Supervision Register who had been removed temporarily from the live visiting list. These have been reviewed during the last few years, and the majority have been found to have given no trouble, are stable in character and temperament, have retained their situations, and have generally proved themselves to be no longer in need of supervision. They are all of adult age and under good home care and supervision. These cases have during the last year been removed from the registers thus releasing Welfare Officers to devote more time to the younger defectives, and particularly children leaving the Occupation Centres.

Guardianship.—There has been little change in the number of cases under Guardianship and they have all been regularly visited by the Welfare Staff, and the Department is satisfied that they are all suitably housed and the supervision satisfactory.

Licence.—There are 95 cases living on licence from the Meanwood Park Colony and other institutions and the following is a summary of how they are occupied.

Employed and self-supporting .. .. ..	..	..	..	60
Employed and partially self-supporting .. .. ..	..	..	..	15
Too low grade for employment .. .. ..	..	..	..	2
Attending Industry Centres .. .. ..	..	..	..	2
Useful at home .. .. ..	..	..	..	16
Total .. .. ..	..	..	..	95

Occupation Centres.—The co-operation of parents with the Welfare Staff and the teachers in sending children to Occupation Centres has continued, and there has only been one case in which the parent has declined to send her child for training due to difficulty of transport. The Centres have been visited by the Commissioners and Inspectors of the Board of Control, by members of the Committee, and students in training.

The girls' evening class for old Occupation Centre scholars has continued with much success, proved most popular and is referred to in the Inspector's report.

The following is a statement of the number on roll and the average attendance :—

Occupation Centre	No. on Roll 31st Dec., 1947	Average Attendance
North Leeds	42	36
East Leeds	106	90
West Leeds	35	28
South Leeds	20	20

The following are copies of reports of a recent visit by an Inspector of the Board of Control.

i. East Leeds Centre.

" It was indeed a stimulating experience to visit this Centre today.

- One is immediately impressed by the keenness and vitality of the supervisor and her staff. This is not only reflected in the children who are alert and responsive but it must undoubtedly have done much to encourage and foster the co-operation of the parents. This Centre can rightly feel proud of its Parents' Association which holds monthly meetings with an average attendance of 50.

I was fortunate at my visit today to be able to meet Mrs. Laing, the Area Organiser for physical training and to have an opportunity of discussing with her the progress these children have made in their physical training. A senior and junior class gave demonstrations in movement exercises ; these exercises are various and are performed in rapid succession, each being of a short duration. The change from one exercise to another, whether it involved the use of simple apparatus or not was carried out quickly and smoothly. the movements throughout in both groups were neat and controlled and the enjoyment of the children was evident.

At this Centre much importance is attached to the value of speech training ; the methods used are on up-to-date lines and progressive and the actual instruction is presented in a manner most likely to appeal to the particular group and so interest is sustained. A recent development has been the formation of a special class for the senior and higher grade children who suffer from speech defect.

The percussion band playing again calls for special mention and in the senior group each player has his or her own individual score, which is an interesting advance in rhythm reading.

Handwork continues to be taught according to a carefully planned graded scheme and it was interesting to contrast the work of the Nursery group at the most elementary stage with their wooden bricks with that of the top group who had progressed through all the stages and some of whom were today making simple garments for themselves and using a machine in the process.

This Centre has an increasing proportion of younger and lower grade children being admitted and the need has arisen for re-arranging and dividing of the lower groups ; a new assistant is to be appointed soon when this will be possible. It will unfortunately necessitate the use of a cloakroom once again for a classroom. The Centre has several children under 5 years of age. The youngest was on admission some six months ago aged 3½ years.

During the period under review several of the bigger boys have been transferred to North Leeds Industrial Centre and there are now no boys here over 16 years. Recent admissions include 4 small boys from Oulton Colony and 4 from the West Riding area.

Plans have been completed for an extension to the Centre to include additional classrooms and cloakrooms."

2. South Leeds Centre.

" It was gratifying on visiting the Pioneer Laundry today to find that several improvements have been carried out since the last visit:

A new Twin Press has been installed in a new position which allows of easier operation and gives more space for the girls working on the Calender. The old collar machines have been removed. All but three of the wooden wash tubs have also been removed and I was informed that two porcelain sinks are on order and when delivered the remaining tubs are to go.

The safety devices on the Hydro Extractor and Calender were in order today.

The floor is again in need of repair in two places, in one place it has been patched up temporarily for safety.

One washing machine has been out of order since November last and was today partly dismantled awaiting removal for repair. This leaves the laundry with only one washing machine and to ease the position the Meanwood Colony is undertaking some washing for the laundry, but the articles are returned for finishing.

I was informed that there has been some trouble in the kitchen caused by water seeping through the floor—this has received attention and new linoleum is on order.

The girls all enjoy a hot dinner cooked on the premises. Today this consisted of stewed mutton, potatoes and cabbage and steamed ginger pudding with custard. A new gas burner has been supplied in the kitchen. Two girls are employed here full-time. The rate of wages paid to these girls varies from 4½d. per hour to 1/- per hour (beginners get pocket money only at the outset) making a nett wage for the 45-hour week vary between 17s. 11½d. and £2 1s. 4d. (only one girl receives the latter wage, several receive 17s. 11½d.).

I was impressed by the happy and friendly atmosphere at the Laundry today; thirteen of these girls belong to the Armley Grange Social Club and attend regularly on Thursday evenings.

Herbert Reed continues to be employed here as assistant boilerman."

3. North Leeds Centre.

"It was encouraging to learn at my visit to this Centre today that during the period under review (10 months) there have been 18 new admissions to the Centre and of the 10 who have ceased to attend eight have gone into regular employment. The majority of the new admissions have come from the East Leeds Occupation Centre. There is a slight increase in the number of boys under 16 years of age. Discipline continues to be well maintained and boys appear interested in their occupations. With the increasing number of younger boys it is more important than ever that due attention should be given to physical training and games. The Supervisor is most anxious that swimming instruction should be given to the boys and it is hoped that it will be possible to make the necessary arrangements later in the year.

A hot dinner is served daily and the under sixteens have the benefit of the free milk scheme. After dinner the boys have a "rest" period, when the seniors and juniors are separated—the seniors having their own recreation room where they can enjoy a game of billiards—the juniors have the dining room, the tables are moved and they can play such games as table tennis, darts, etc.

The senior boys continue to receive a weekly wage."

4. West Leeds Centre.

"I was sorry to learn at my visit to this Centre today that the Supervisor was in hospital ; in her absence Miss Hobson was in charge

Unfortunately, however, the ordinary routine of the Centre was upset as central heating is being installed and there were several workmen on the premises. Three rooms were temporarily out of use.

In connection with the installation of the central heating, I would like to draw attention to the unsatisfactory lay of the pipes in the Senior Classroom and Assembly Room. In both these rooms the windows are low and the pipes are some 18 inches from the windows and approximately 3 to 4 inches off the floor, thus constituting a source of potential danger because any child tripping over them runs the risk of falling through the window. There were seen to be two alternatives ; either to move the pipes close to the wall below the windows or erect permanent seating over them ; if materials were available the latter would probably be preferable.

The Centre has a well-varied and practical time-table and much valuable training continues to be given through the medium of play. In the Senior Class, however, I would suggest that 3R work be limited only to these few children who are really capable of benefiting by it. I would further suggest that consideration be given to the introduction of Puppetry which would help, as is found elsewhere, in speech training.

I discussed with Miss Hobson the inadvisability of allowing the girls access to the playground through the boys' cloakroom, particularly as this is used by an adult male defective employed at the Centre. There are three other possible means of access and Miss Hobson undertook to make alternative arrangements.

There is now only one boy over 16 years of age attending this Centre. He is very deaf and physically handicapped and would be unable to attend at North Leeds—he continues to fit into the group here."

5. Armley Grange Social Club.

"I was most interested to hear that, through the initiative of Miss Bye, the Supervisor, a Social Club had been started for girls. The Club meets at the Centre on Thursday evenings from 7 to 9 p.m. Light refreshments are served. The Club has a membership of 23. I visited it this evening and found 17 girls present. They formed a happy friendly group—several were occupied knitting and doing needlework. Others were enjoying themselves dancing. The atmosphere was delightfully informal.

The previous week they had formed a party and booked seats for the Pantomime which they had enjoyed enormously. Several are saving for summer holidays. A caravan has been booked at Bridlington and those girls who want to will be able to spend a week there in the summer, going in escorted parties of 8 and paying their own expenses.

In the absence of Miss Bye this evening, the Club was being run by Mrs. Coates and Mrs. Cooper of Armley Grange and Mrs. Petty of the Pioneer Laundry—Mrs. Coates and Mrs. Petty being regular helpers at the Club. I would wish Miss Bye and her helpers every success in this new venture."

Meanwood Park Colony.—Accommodation has gradually been released by the Emergency Medical Services and at the close of the year there were only two Villas, i.e., the Hospital and the Low Grade Villa which had not been handed back.

In November last the Department hitherto controlled by a separate *ad hoc* Committee of the Council was merged with the Health Department under the direction of the Medical Officer of Health, thus anticipating the "appointed day" of the National Health Service Act, 1946. Authority has been given for a full-time Assistant Medical Officer for Mental Health and it is hoped as soon as practicable to implement the Scheme of the City Council under Section 51 of the Act and to provide as a long term policy a comprehensive scheme for the prevention, care and treatment of mental ill-health.

Meanwood Park Colony

BY

A. H. WILSON, M.B., Ch.B., D.P.M.

Medical Superintendent.

Statistics.—A significant feature of the statistics is the small number of admissions. While in 1946 and in 1947 discharges, transfers and deaths were 25, the admissions fell from 35 last year to 10 in 1947. The low admission rate was due to lack of accommodation and of staff.

The following tables give details of admissions, discharges, etc., during the year:—

	Males	Females	Total
Total No. on Books at 31st Dec., 1947	266	395	661
Total No. in Residence	236	346	582
" " on Licence	30	49	79
No. of Admissions	5	5	10
" " Transfers	..	1	1
" " Deaths	2	5	7
" " Discharges	4	7	11

CLASSIFICATION OF ADMISSIONS

	Males	Females	Total
Idiots	..	1	1
Imbeciles	1	1	2
Feeble-minded	4	3	7

CLASSIFICATION BY AGE GROUPS

	Males	Females	Total
Under 16	47	37	84
16 to 20	58	47	105
21 to 39	131	188	319
40 and over	30	123	153

Health.—The general health of the patients was satisfactory. Only a few sporadic cases of infectious disease occurred. Two patients died of pneumonia, two of malignant disease of the bowels and one each of epilepsy, dysentery and bronchitis.

X-Ray examinations of the lungs of the patients has been carried out systematically since 1946 by Dr. Rowden, visiting Radiologist of the Emergency Hospital. Cases where the diagnosis was doubtful were referred to Dr. Ridehalgh, Chief Clinical Tuberculosis Officer. Of 605 patients examined eight (1·3 per cent.) suffered from tuberculosis and in two (0·3 per cent.) the lesions were active, and were not detected without radiography. Since 1941 771 patients were examined and 14 (1·8 per cent.) were found to have active tuberculosis.

The dental surgeon (Mr. P. Malone, L.D.S.) visited each week and carried out 535 treatments, of which 377 were conservative and 158 operative. He inspected admissions and the remaining patients at six-monthly intervals.

Accommodation and Classification.—Two villas have been returned by the Ministry of Health, but their reconstruction has not been completed. Alterations to the farm house and the hostel to accommodate male staff were begun in the Autumn.

The occupants of any particular villa were of the same sex, and of approximately similar age group and level of intelligence. The use of more villas should be followed by better classification so that the range of ages and degree of defect in the occupants of a villa may be reduced.

Industrial Training and Education.—*Male*—Most of the able-bodied adults were employed in the market gardens where produce, as under, was grown. Vegetables, surplus to Colony requirements, were sold through the Central Purchasing Department. The total produce was valued at £1,924.

Potatoes ..	..	..	..	..	..	74	tons
Cabbages ..	..	..	..	..	..	21	"
Turnips ..	..	..	..	..	..	20	"
Cauliflowers ..	..	..	..	..	..	4	"
Carrots ..	..	..	..	..	..	3 $\frac{3}{4}$	"
Beetroot ..	..	..	..	..	..	2	"
Brussel Sprouts ..	..	..	..	..	..	15	cwt.
Lettuce ..	..	..	..	..	..	286	doz.

The patients unfit for land work were trained in making rugs, mats, paper bags, baskets, papier maché bowls, in knitting socks, weaving, carpentry and in tailoring repairs. They repaired 4,405 articles and made 3,640 in the workshops.

Small parties were employed in repairing and building walls, in clearing the grounds for the construction of playing fields and in helping the boilermen.

Females.—The majority of the women were engaged in domestic work in the kitchens, the villas and the Nurses' Home. A smaller number were employed in the laundry where they washed 10,000 articles weekly, at an approximate annual value of £5,500.

The numbers working in the needlecraft rooms were smaller and they dealt with repairs of girls' clothing and ward stocks.

School.—The school was staffed by the Head Teacher (Miss A. Wingate), one trained teacher and six untrained assistants.

Instruction, adapted to the intelligence of the pupils, varied from simple habit training to elementary reading, writing and arithmetic. Physical training, handicrafts and percussion band practice were the chief subjects of the curriculum. A good standard of manual work was achieved, and was commended by the parents at the Annual Open Day in November. In addition to the usual school work, the staff shared the social activities of the children by taking them on excursions to Bridlington, and to visit the theatre, the parks and the Museum in Leeds.

	Male	Female	Total
School classes	25	42	67
Villa classes for physically handicapped	11	10	21
Handicraft classes .. .. ..	..	10	10
Totals	36	62	98

Promotion of Industry and Behaviour Rewards.—The payment of conduct and industry rewards and the privileges of increased freedom and parole continued to act as incentives to habits of industry and of good behaviour in the more intelligent patients.

Recreation.—*Males*.—During the appropriate seasons cricket and football matches were arranged with visiting teams. Billiards, dominoes, ring boards and card games were available for indoor amusements.

Females.—Dancing, needlecraft, cards and impromptu concerts were popular recreations. Facilities for netball were provided for the younger patients. A library of books was available for those able to read.

For both sexes open-air exercise, walking and gardening were encouraged. Parties attended a week's camp at Marske, and day excursions to Bridlington were arranged in the summer. Concert parties, amateur dramatic societies and dancing classes entertained the patients on 18 occasions in the Recreation Hall, where weekly cinema shows were also held. Parties were taken to the Pantomime at the Theatre Royal during the winter.

The Deputy Lord Mayor and Deputy Lady Mayoress (Councillor and Mrs. Kaberry) visited the Colony and presented the prizes at the Annual Fancy Dress Dance. The Chairman and members of the Committee attended the patients' Sports held at the Colony in July.

Leave.—Leave was granted to 315 patients at August Bank Holiday and at Christmas.

Scouts.—31st North West Scout Group and Rovers.—The Group Scoutmaster, Mr. G. A. Chapman, assisted by Messrs H. Holland and E. A. H. Chapman, directed the training of the Group. There were 20 Rovers and 18 Scouts on the roll, and 70 meetings and 14 Church Parades were held.

During the summer the Rovers attended camps at Bramhope and at the Colony. Most of the meetings were held at the camp site in the Boulder field at the Colony and many necessary repairs of the site were made.

Members of the Group gave a gymnastic display at the patients' Sports, and others, assisted by the 8th North West Troop, formed a bugle and drum band which paraded on that occasion. A satisfactory standard of efficiency has been maintained, due largely to the enthusiastic and voluntary services of Mr. G. A. Chapman and his assistants.

Guides.—2nd Meanwood Trefoil Guild, Rangers and Guides.—Miss Wingate organised the Trefoil Guild at the Colony, and has held meetings regularly and maintained the interest and co-operation of the women.

Mrs. Rhodes, assisted by Miss Lister, directed the activities of the Rangers and Guides who met weekly for training. The Rangers and Guides have taken an active share in the field work with neighbouring Rangers and attended the Church Parades in Leeds. The patients appreciated the work done for them by the Officers who have given their time freely to maintain the Ranger and Guide Companies in being.

At Crooked Acres, Miss Shapley has held fortnightly meetings of the Trefoil Guild. The patients were very interested and looked forward to the meetings with eagerness.

The Scout and Guide movements at the Colony, and at Crooked Acres, were, with the exception of Miss Wingate, officered by voluntary workers in the movement. They have taken great interest in the patients and have always been willing to co-operate whole-heartedly with the Colony staff.

Crooked Acres.—This annexe was occupied by 31 women. They are employed as daily domestic workers at houses in the vicinity. Their work has been satisfactory, and the demand for their services exceeded the number available.

Religious Instruction.—The Vicar of Meanwood, Rev. J. Borrow, continued as Chaplain of the Colony, the Rev. F. Raine resigned as Nonconformist Chaplain and was succeeded by the Rev. Ivor Calvert of Meanwood Methodist Church. Rev. H. Backhouse was the Roman Catholic Chaplain.

Services were held each Sunday in the Recreation Hall. The Roman Catholic patients attended classes of instruction by Rev. H. Backhouse and the Sisters of Notre Dame Convent, and suitable patients attended the services at the local church on Sundays. The Jewish clergymen visited members of their congregation, and facilities were given for the observance of their religious festivals.

Staff.—Five nurses passed the Preliminary and three (one with distinction) the Final Examinations for the R.M.P.A. Certificate in mental deficiency nursing.

Recruitment of female nurses did not improve during the year and although part-time nurses and nursing assistants were employed, lack of full-time nurses prevented a reduction of hours and the staffing of more villas.

The Matron, Miss C. S. Wilson, retired on 31st December after twenty years service. She was Matron-Superintendent for twelve years. Her staff and patients remember her for her tolerant and sympathetic management, and her zeal in forwarding the progress of the Colony.

Tuberculosis.

The number of cases on the register at the end of 1947 was 3,894 as compared with 4,076 at the corresponding period of last year, a decrease of 182.

Statistics.—*Notifications.*—During the year 518 cases of pulmonary tuberculosis (of which 42 were transfers from other areas) and 133 non-pulmonary (of which three were transfers from other areas) were notified making a total of 651 cases (which includes 45 transfers from other areas). Of the total 358 were males and 293 females. Compared with the previous year this is a decrease of one in the pulmonary and a decrease of 45 in the non-pulmonary notifications, and compared with the average of the previous five years, a decrease of 74 pulmonary and a decrease of 29 non-pulmonary.

The case-rate of pulmonary tuberculosis was 1·05, of non-pulmonary 0·27, and of all forms of the disease 1·32, as compared with 1·08, 0·37 and 1·45 respectively for the previous year.

Of the total cases of pulmonary tuberculosis notified 5·6 per cent. were children under 15 years, 24·9 per cent. persons between 15 and 25, and 69·5 per cent. were in the remaining age groups. The corresponding figures for the previous year were 7·3 per cent., 24·1 per cent. and 68·6 per cent., respectively.

As regards the non-pulmonary type of disease 54·9 per cent. were children under 15 years and 45·1 per cent. persons over 15 years. The corresponding figures for the previous year were 50 per cent. and 50 per cent., respectively.

Of the total cases notified 443 were by medical practitioners, 163 came from institutions and 45 were by transfer from other areas.

The number of cases of pulmonary tuberculosis not heard of until time of death was 17 and the number of non-pulmonary three, making a total of 20 or 3·1 per cent. of the total notifications for the year. This is a decrease of four on the figure for the previous year.

Out of a total of 342 deaths from tuberculosis of all forms, 59, or 17·2 per cent. were notified in the same year as death occurred, eight or 2·4 per cent. in the same month and 46 or 13·5 per cent. in the same week. In the previous year there were 36 or 12·5 per cent. in the same year as death occurred, seven or 2·4 per cent. in the same month and 40 or 13·9 per cent. in the same week.

Deaths.—The total deaths from tuberculosis of all forms during the year numbered 342, of which 200 were males and 142 females. Of the total pulmonary tuberculosis accounted for 305 or 89·2 per cent. and non-pulmonary 37 or 10·8 per cent. The death-rate from pulmonary tuberculosis was 0·62, from non-pulmonary 0·08, and from all forms of the disease 0·70, as compared with 0·54, 0·06 and 0·60 respectively for the previous year.

Set against the average rates of the previous five years these figures represent a decrease of 0·01 in the pulmonary rate, no change in the non-pulmonary rate (0·08) and a decrease for all forms of the disease of 0·02.

Public Health Act, 1936, Section 172.—No action was necessary under this section during the year.

Notifications of tuberculosis received during the year.

PULMONARY.

Ages.	-I	I-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	..	4	6 (1)	53 (7)	66 (9)	57 (6)	53 (1)	40 (2)	19 (1)	298 (27)
Females	I	8	10 (1)	76 (5)	58 (7)	32 (1)	19 (1)	8	8	220 (15)
Totals..	I	12	16 (2)	129 (12)	124 (16)	89 (7)	72 (2)	48 (2)	27 (1)	518 (42)

NON-PULMONARY.

Ages.	-I	I-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males..	I	20	20	5 (1)	6	6	I	I	..	60 (1)
Females	2	14	16 (2)	13	10	7	6	4	I	73 (2)
Totals..	3	34	36 (2)	18 (1)	16	13	7	5	I	133 (3)

* Figures in brackets are 'Transfer In' cases and are included in the totals.

PULMONARY TUBERCULOSIS.

AGES AT DEATH.

1947.	-I	I-5	5-15	15-25	25-35	35-45	45-55	55-65	65 +	Total
Males ..	..	..	..	5	28	38	58	34	21	184
Females ..	..	I	I	34	33	23	17	5	7	121
TOTALS ..	..	I	I	39	61	61	75	39	28	305
Average 10 years 1937-1946	I	1	3	53	67	65	65	53	19	328

NON-PULMONARY TUBERCULOSIS. DEATHS.

1947	Tubercular meningitis.	Abdominal.	Bones and Joints.	Other tuberculosis.	Total.
Males ..	II	I	I	3	16
Females ..	10	2	I	8	21
Totals ..	21	3	2	11	37

AGES AT DEATH.

1947	-I	I-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males ..	I	8	2	..	I	..	I	2	I	16
Females ..	2	6	I	2	1	I	3	3	2	21
Totals ..	3	14	3	2	2	I	4	5	3	37
Average 10 years 1937-1946	3	12	9	7	4	4	4	2	2	47

TUBERCULOSIS.

YEAR.	DEATHS.						NOTIFICATIONS.					
	Pulmonary tuberculosis.		Non-pulmonary tuberculosis.		All forms tuberculosis.		Pulmonary tuberculosis.		Non-pulmonary tuberculosis.		All forms tuberculosis.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Cases.	Case-rate.	Cases.	Case-rate.	Cases.	Case-rate.
1935	358	0·73	77	0·16	435	0·89	569	1·17	141	0·29	710	1·46
1936	346	0·71	62	0·13	408	0·83	531	1·08	163	0·33	694	1·42
1937	354	0·72	52	0·11	406	0·83	548	1·11	214	0·44	762	1·55
1938	336	0·68	61	0·12	397	0·80	511	1·03	176	0·36	687	1·39
1939	353	0·72	60	0·12	413	0·85	555	1·14	137	0·28	692	1·42
1940	416	0·89	51	0·11	467	1·00	557	1·20	110	0·24	667	1·43
1941	362	0·77	46	0·10	408	0·86	598	1·27	162	0·34	760	1·61
1942	310	0·67	47	0·10	357	0·77	638	1·38	170	0·37	808	1·75
1943	325	0·72	53	0·12	378	0·83	595	1·31	151	0·33	746	1·64
1944	277	0·61	39	0·09	316	0·70	631	1·40	157	0·35	788	1·75
1945	286	0·63	32	0·07	318	0·70	579	1·28	156	0·35	735	1·63
1946	261	0·54	27	0·06	288	0·60	519	1·08	178	0·37	697	1·45
1947	305	0·62	37	0·08	342	0·70	518	1·05	133	0·27	651	1·32

THE HEALTH CLINIC AND SANATORIA

BY

FRANK RIDEHALGH, M.A., M.B.(Cantab.), M.R.C.P.(Lond.),
Chief Clinical Tuberculosis Officer.

General.—The passing of 1947 marks the end of an epoch in tuberculosis control. For more than thirty years, the Local Authority through its Health Committee, has been responsible for the provision of special measures for the prevention, diagnosis, treatment and after-care of a disease which has more and more been accepted as presenting unique problems from each of these aspects. Wide variations in the scope and quality of service offered by various local authorities have arisen, sometimes by reason of local geographical or financial conditions, more often from the attitude of the governing body which, in some cases, has been content to fulfil the letter of a statutory duty, in others has gone far beyond its minimum duty in a genuine attempt to abolish tuberculosis.

“Leeds Leads” is a proud boast. In tuberculosis work the claim can be sustained. The Leeds Association for the Care of Consumptives was a pioneer. At a time when few others had recognised the special needs of the tuberculous, the Association was operating a planned scheme which, in its period, was an example to the rest of the country, and from which the present organisation differs in scope but not in design. In its two senior officers—Dr. H. de C. Woodcock and Dr. Norman Tattersall—no less than in its Medical Officer of Health, Dr. J. Johnstone Jervis, the city was blessed with men who combined outstanding ability and efficiency with vision and humanity. For more than twenty years a rehabilitation factory has operated and has been in full swing during that time thus anticipating the famous author of the Tomlinson Act.

A city area of this type has special advantages for the planning of a tuberculosis service. The population is compact and accessible, and has suffered no serious trade depression in the period under review. It has been possible, therefore, to provide dispensary, sanatorium, social welfare and ancillary services which are big enough to carry a full range of equipment and yet are not unwieldy. Above all, where doctors, health visitors, social workers and members of the Health Committee have worked together as a team, in almost daily contact throughout the years, then it has been possible to

co-ordinate every aspect of the attack on tuberculosis. The problem individual and epidemiological, has been visualised "in the round," and the attack has been made with all weapons.

During the war years, Tuberculosis Treatment Allowances and Mass Radiography have been added to the armoury. Both have been operated from the Health Clinic. It has therefore been possible to deal with Allowances in the light of personal knowledge of the tuberculous family. Mass Radiography, I think, could have been used more intelligently, had we not been compelled to give "fair shares" to a wide region, and thus to dilute its effect upon tuberculosis morbidity to homeopathic proportions.

The Health Clinic, therefore, has been the nerve-centre of operations whether clinical, sanitary or social. This is right, since its connection with each tuberculous family is life-long. During the past thirty years, we have seen tuberculosis diminish by more than 70 per cent. This may be, as Dr. Jervis held, "the greatest achievement of preventive medicine in this country." A more cynical statistician may regard it as matter for thankfulness rather than self-congratulation. Nevertheless, we in Leeds have reason to feel that we have laboured well in this field.

This is not to say that we have done all we might. Our shortcomings must be recorded. The Health Clinic is grossly inadequate for the volume of work. Doctors, Health Visitors, Social Workers, X-Ray technicians, clerical staff and patients are badly overcrowded. There is no room for a much-needed increase in medical staff. More dressing rooms are needed.

There is an absolute deficiency of sanatorium beds. This is by no means all due to the shortage of nurses. If we could fill every available bed, and retain the ill-planned wards of St. George's Hospital, we should still have a waiting list of nearly 100 patients, and at least a four months' delay in admission. Less than half our available beds are designed for the treatment of tuberculosis—the rest are bad makeshifts. We have no provision for tuberculous infants, and we have not begun to deal with the problem of the tuberculous expectant mother. We have the services of a thoracic surgeon of the very first class, who wastes his time travelling from one set of makeshift premises to another. As the centre of a region it is surely our duty to press on with the development of a local centre for this work. Beyond and above these concrete faults, I would say that the major defect of our service in Leeds is that the pressure of day-to-day routine work is so great that there is no

time for constructive thought. "What is this Life. . . ." Nevertheless, we have laboured well, and we may take pride in what has been done. What then of the future?

The first lesson of the past for the future is the absolute necessity that clinical, preventive and social services for the tuberculous must be integrated. This means that the Tuberculosis Officer must act as the link between these services and the tuberculous family. He knows the facts of a case; he can translate the rumble of departmental machinery into help for human needs. On July 5th, 1948, the control of clinical work in tuberculosis will pass to the Regional Hospital Board. Preventive work, and a measure of social service, will remain with the Local Authority. Financial help will come from the Ministry of National Insurance and the Assistance Board. Rehabilitation and resettlement will be the responsibility of the Ministry of Labour and National Service. When the life and welfare of a tuberculous person and his family depend on the co-ordinated actions of four distinct Government departments and a Local Authority, what chances there are for delay, departmental hair-splitting, for the patient's bewilderment and ultimate despair. Yet these bogies are perhaps less real than they seem. If they are to be overcome two things seem to be vital. The Regional Hospital Board must accept the fact that tuberculosis has problems different from those of *any* other disease, and must plan its tuberculosis service at Regional level. Secondly, the Tuberculosis Officer must handle every aspect of his speciality, must control his own team of specially trained social workers and health visitors, and must maintain the closest and friendliest relationship with the Medical Officer of Health of the area he serves. He must become more than a clinician, he must be a social physician if his attack on the fundamental causes of Tuberculosis is to be maintained.

Statistics.—The figures of mortality and morbidity, and the details of work done at the Health Clinic, differ only slightly from those of 1946. Notifications show a decrease and deaths show a slight increase; the overall work of the Clinic a slight decrease except for X-Ray examinations. These are the normal year-to-year fluctuations and have little statistical significance. The acute deficiency of Health Visitors is reflected in the small number of home visits; only the most essential visits can be done and there is no doubt that the valuable influence of these devoted workers in patients' homes is seriously reduced. Health Visitors no longer staff the Ultra-Violet Light Clinic, nor do they work with the dentist.

Health Clinic.—The following table is a summary of the work done.

SUMMARY OF WORK OF HEALTH CLINIC

					1947.
Examinations and consultations	10,327				
Contact examination	1,041				
X-Ray films	8,173				
X-Ray screenings	10,782				
Home visits by Doctors	896				
Home visits by Health Visitors	6,501				
Pneumothorax refills and inductions	4,699				
Other special treatments	764				
Ultra-violet light treatments (Closed 2 weeks owing to staff changes)	6,484				

Staff Changes.—Dr. W. Guthrie left us in August to take up the post of Director of Mass Radiography under the Nottinghamshire County Council.

The vacant post of Deputy Clinical Tuberculosis Officer was filled by the appointment from the Mass Radiography Unit of Dr. J. Aspin, M.A., M.D., D.M.R.D., in December. His post was filled by Dr. B. A. Walsh.

An Assistant Dental Officer has been appointed.

Institutions.—Fuller details will be found in Dr. Gilmour's Report.

In November, the Children's Sanatorium School returned to its old home at "The Hollies." Whilst the consequent loss of even a few beds for adult female pulmonary cases is regrettable, there is no doubt that the children have already benefited greatly from the change.

Gateforth Sanatorium.—The new pavilions have been completed and are in use. The inadequacy of the nurses' home has made it necessary to use one half-wing as nurses' bedrooms. The cottages have been completed; one is in use for male nurses, the other is occupied by the chef. The increase in available accommodation and the wider range of treatment being given at Gateforth, will necessitate replacement in the near future of the small mobile X-Ray unit by a larger and more versatile plant for which an X-Ray room and darkroom will be necessary.

The following table gives details of admissions to and discharges from the Sanatorium during the year.

Patients remaining in Sanatorium on 1st January, 1947	..	61
Admitted during the year	..	91
Discharged	..	77
Died	..	11
Remaining in Sanatorium on 31st December, 1947	..	64

Social Welfare.—A total of £19,453 14s. 9d. was distributed in Treatment Allowances to 629 patients and dependants during the year. The Care Association has continued its valuable work and it is hoped that it will have even greater opportunities in the future. The Care Committee disbursed £1,822 15s. 10d. to necessitous patients and families, in the following manner :—

	Patients or Families		
Groceries	236
Clothing	163
Beds and bedding	99
Sickroom requisites	47
Fares	15
Convalescence	18
Home Help	9
Miscellaneous	49

It also arranged other help as follows :—

	Patients		
Free milk	659
Surgical appliances	22
Dentures	63

Housing.—The rehousing of tuberculous families remains most unsatisfactory. It should not be inferred that the Housing Committee fail to give what help they can—I am sure that they do their best—but when no less than 266 tuberculous families continue to be housed in shockingly bad conditions, when tuberculous families continue perforce to live overcrowded in slum dwellings, when children continue to die from tuberculous meningitis for no other reason than that it is impossible for them to sleep apart from an infectious person—so long as these conditions continue, then there is no room for complacency, either in this clinic or in the Housing Department. Five per cent. of an exiguous production of new

houses is a totally inadequate provision for the tuberculous. This meagre allocation, together with a few re-lets, permitted the re-housing of 63 families during the year; since there is no point in raising false hopes, only 139 new families were recommended for re-housing.

Rehabilitation.—The "Factory in the Field" has operated normally during the year. Considerable progress was made with the preliminary work for the Remploy factory projected by the Disabled Persons Employment Corporation on the Killingbeck site. The situation of the factory was agreed between this body, the City Council in its capacity as a planning authority, and the Ministry of Works. At this point the critical national situation led to an embargo on all such projects and the scheme remains—on paper. There is a possibility that a similar factory on another site may be developed for use as an interim measure.

The registration of disabled persons has continued and the arrangements by the Ministry of Labour for placing tuberculous persons in industry and in training courses show some improvement on the previous year. There is room for a much closer link between the Tuberculosis Officers and the District Resettlement Officers, but since the former cannot afford to reduce the amount of their clinical work then they have no time to increase this important part of their welfare duties.

Thoracic Surgery.—The following table shows the increase in surgical treatment during the past five years:—

OPERATIVE TREATMENTS AND CONSULTATIONS BY MR. P. ALLISON.

Year	Extra Pleural	Cavity Drainage or Empyema	Thoracoplasty		Adhesi- otomy	Broncho- scopy	Phrenic A.P., P.P., Skin Graft	Total Consult- ations
			Patients	Stages				
1943	..	1	3	3	13	43	25	145
1944	1	1	14*	23	19	48†	6	189
1945	1	..	21	42	44	20	4	178
1946	2	3 patients 4 stages	14*	27	64	13	9	323
1947	4	11 patients 18 stages	16‡	33‡	116	55	40	480

* Includes one operative treatment in Leeds General Infirmary (privately).

† Includes one Lobectomy.

‡ Includes two Thoracoplasty cases and one cavity drainage.

Dental.—Mr. Hilton, the Senior Dental Officer, has prepared the subjoined table:—

SUMMARY OF DENTAL TREATMENT GIVEN DURING 1947

	Health Clinic	St. George's Hospital	Gateforth	The Hollies	Meanwood	Killingbeck	Home Visits	Total
Cases { Examined ..	99	42	74	21	57	147	..	440
Treated ..	158	13	34	13	15	63	..	296
Attendances ..	689	103	176	55	80	392	..	1,495
Extractions :—								
Local anaesthetic ..	416	48	75	12	..	198	..	749
N ₂ O .. ..	..	..	..	..	26	..	..	26
Fillings	64	22	41	15	5	73	..	220
Scalings	23	1	12	1	..	24	..	61
Polish	13	1	6	3	1	11	..	35
Dentures :—								
Number completed ..	78	2	4	..	..	17	..	101
Patients fitted ..	46	2	3	..	..	10	..	61
Repairs, etc. ..	16	..	..	..	..	7	..	23
Other Treatments ..	63	7	21	3	2	32	..	128

**"CONTACTS" FIRST EXAMINED AT THE HEALTH CLINIC
FROM JANUARY 1st to DECEMBER 31st, 1947.**

	New Contacts Examined	Found Sputum T.B.+	Clinically definite, but sputum negative.	Diagnosed Non-Pulmonary Tubercle.	Found to be Non-Tubercular, lost sight of, etc.	Remaining under observation.
Males	211	9	5	..	189	8
Females	346	6	11	..	313	16
Boys	200	..	3	6	167	24
Girls	207	..	8	2	175	22
Total	964	15	27	8	844	70

105 cases remaining under observation on December 31st, 1946, were re-examined, with the following results:—

M. F. B. G.

Definitely diagnosed as tubercular — 1 1 2

Marked off as non-tubercular, died, lost sight of, etc. 4 17 41 24

Remaining under observation 1 2 8 4

Total examinations made = 1,641 (1,368 cases).

SUMMARY OF QUARTERLY RETURNS MADE TO MINISTRY OF HEALTH ON FORM T.145 (1947).

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DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—Number of definite cases of Tuberculosis on the Dispensary Register at the beginning of the year ..	1,376	1,064	190	211	206	249	231	224	1,582	1,313	421	3,751
Inward Transfers ..	45	17	1	4	1	3	1	4	49	18	1	73
L.S.O. Cases Returned ..	6	5	2	..	..	..	..	..	6	8	3	17
B.—Number of New Cases diagnosed as Tuberculosis during the year ..	107	100	10	16	..	..	..	..	..	239	213	37
(1) Class T.B. minus	116	79	2	..	..	..	..	..	..	20	25	36
(2) Class T.B. plus ..	..	..	..	..	..	..	..	..	..	..	..	..
(3) Non-Pulmonary ..	..	..	..	..	..	..	..	..	..	..	..	..
C.—Number of cases included in A. and B. written off the Dispensary Register during the year as :—	84	62	41	27	17	20	26	25	101	82	67	302
(1) Recovered ..	171	111	2	4	..	1	..	1	171	112	2	290
(2) Dead (all causes) ..	..	..	..	..	..	..	..	..	..	..	..	..
(3) Removed to other Areas ..	30	26	1	3	4	5	2	2	34	31	3	73
(4) For other reasons ..	49	28	5	3	5	8	6	2	54	36	11	106
Transfers to Pulm. from N.P.	..	1	..	1	..	1	..	1	..	..	..	..
D.—Number of definite cases of Tuberculosis on the Dispensary Register at the end of the year ..	1,316	1,039	156	192	200	252	223	217	1,516	1,291	379	3,595

PATIENTS (EXCLUDING CONTACTS) FIRST EXAMINED AT CITY OF LEEDS HEALTH CLINIC
 FROM JANUARY 1ST, TO DECEMBER 31ST, 1947.
 PULMONARY TUBERCULOSIS.

New patients.		Number bacteriologically positive.				Number clinically positive, but not T.B. +.				Number found to be Non-tubercular, lost sight of, etc.				Still under observation.	
M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.
1,076	1,037	128	144	106	103	..	..	52	50	5	6	785	809	110	88

OTHER FORMS OF TUBERCULOSIS.

New patients.		Bones and Joints.				Abdominal				Other Organs.				Glands.	
M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.
15	31	18	17	4	6	5	2	1	8	1	2	7	9	2	..

Total attendances at Health Clinic for—

- (a) Light treatment 6,484
- (b) Other special treatments 5,229
- (c) New and Review examinations 9,862
- (d) X-ray 1,732

23,307

Total Number of Clinical Examinations

- (included in attendances) 10,313
- Number of cases making the clinical attendances (excluding Light and Special treatments) 6,204

30

Observation cases of previous years re-examined as follows :—

Definitely diagnosed as tubercular	30
Marked off as non-tubercular, and for other reasons	322
Remaining under observation	48

400

Killingbeck Sanatorium.—(*Report by Dr. W. Santon Gilmour, Medical Superintendent*).—Killingbeck Hospital was built to accommodate smallpox half a century ago, the necessity for its actual use for such has never arisen so that it is not surprising that such a useful site has been the victim of opportunism to meet other hospital needs as they arose, and only natural that it was relegated to the Cinderella Tuberculosis to accommodate the demands of the 1912 Act. Two wars have intervened and during both tuberculosis was put back into limbo.

This last year is the first complete one since the end of the second war, during which tuberculosis only has been treated. It has been a time of rehabilitation of the whole institution as well as of the patients.

It started off with the sanatorium denuded, except for a few stalwarts, of a staff arduously trained over a period of years in the treatment, physical and psychological, of tuberculosis. At a period when there was a general shortage of young women recruits to nursing there was not even a nucleus of juniors from the war years to build upon.

In the wards the tradition of rest and other basic things of treatment was non-existent—there had been a hiatus of almost eight years. The hardly instilled public health responsibility of the tuberculous had gone too.

Much equipment, furnishings and technical apparatus had been loaned, lost sight of or just taken during the emergency. There was not at first even an X-Ray apparatus and there is still no dental equipment, though there had been a modern dental surgery.

In spite of the war, an attractive new nurses' home has been completed. In 1947 it stood only partly used because nurses were few and many were non-resident. Male nurses were meeting the need on the male wards and their fitness to inhabit the new hostel had to be proved. Meantime, the thrice-condemned Killingbeck Old Hall was superficially rejuvenated to house such men as were resident. After an initial period of resentment they have learned to appreciate their sequestered quarters.

Despite these difficulties, from a few score of occupied beds, the sanatorium is now treating over 200 patients. The Matron is to be complimented on her energy in recruiting the necessary nursing staff and for her eventual breadth of vision in seeing that the patient had to be served somehow in this changed post-war world, and that a heterogenous staff of men and women, resident and non-resident, however difficult they might be to administer, was the only way out.

To a great extent the repercussions of the world without, in peace and in war, do not penetrate to the ordered existence of permanent dwellers within a sanatorium's boundaries. Traditional nursing had taught that no-one was fit to smooth a sheet, even less to handle a patient's bed-pan, who was not or had not been a cloistered female novitiate of the vocation. So rapid changes have been faced and the senior nursing staff are all to be appreciated for their tolerance and patience. They have made it possible again to treat an almost full complement of patients on routine sanatorium lines, while relaxation therapy and surgical intervention are being practised under greater pressure than before the war, for better or for worse, and finally the hospital has been fortunate in being chosen by the Medical Research Council as a centre for the trial of the most recent form of chemo-therapy, Streptomycin. The sometimes disappointing results of this on chronic established pulmonary tuberculosis were previously known from American experience, but the effects on bronchial and upper respiratory disease have been outstanding, and there have been fair results in recent lung infiltrations.

Another difficulty of the times has been the daily one of providing sufficient nourishing and palatable food. Except for a few meagre concessions, the central health and food authorities have decided that the diet for the tuberculous should be the same as that for the healthy sedentary workers. This, in spite of providing expensive accommodation and special treatment, and in the face of the knowledge that the development of active tuberculosis is related to nutrition and that the provision of a high value diet is essential to the basic treatment of the disease. The staff never really succeed in making the patients believe that special diet is

not released for them. The appointment of a chef again recently should help to solve the problem of palatable food. Ingenuity and a constant search for nourishing foods, unrationed, helps to fill the gap of missing calories at great expense and not really efficiently. Calories are not all, they can be taken in by eating a surfeit of hay in bovines—in humans, for the control of tuberculosis, high-class proteins and fats are essential but are absent.

The fabric and the grounds have suffered from the meagreness of maintenance during the war. There is still much to do, but in a short time much has been achieved in spite of the difficulties in obtaining materials and the vagaries of centrally controlled direct labour. Of new work, an X-Ray Department is being built around the X-Ray plant as it operates, and a theatre unit is on the way to completion.

Minor improvements have been carried out in the bathrooms and lavatories of the male wards, but the war has been the death knell of the chances of modifying the male wards from their old fever design to modern ward units like those provided for the women before the war.

Apart from maintenance, in peace time from year to year small new improvements were effected. These again have been missed and the accumulated list therefore suggests insatiable demands. The Regional Board, however, will be acquiring an institution in very reasonable repair, functioning actively and on the upgrade rather than otherwise, and with it the City Council is handing over some 75 acres of grassland which will protect and enhance the hospital always.

Statistical details of treatment, numbers, staffing and costs are not being enlarged upon as the year has been one of constant changes and increases; previous figures are not comparable and accurate significance not easily fixed. The outstanding features are the rising costs of all sections, out of proportion with results, and apparently out of reasonable control.

It only remains for me to make acknowledgments for the co-operation of all concerned in the welfare of the patients, particularly the Health Committee and Department—a long association unfortunately to be broken next year. The loyal service of the staff has maintained, and will, under the new régime, continue to maintain the central motif of any hospital—the physical and mental well-being of the patients.

Statistics.—The following table gives details of admissions, discharges, etc., to and from the sanatorium during the year.

	Males	Females	Children	Total
Patients remaining in Hospital 1st January, 1947	63	31	1	95
Admitted during year	197	113	3	313
Total treated	260	144	4	408
Discharged during year	115	55	4	174
Died	30	17	..	47
Patients remaining in Hospital 31st December, 1947	115	72	..	187

The average length of stay for discharged patients was: male (pulmonary) 152·3 days, male (non-pulmonary) 99·5 days, females (pulmonary) 163·4 days, children (pulmonary) 129 days.

The average percentage of bed cases was 84·1.

X-Ray films taken at Killingbeck since the plant came into operation on 26th March, 1947, numbered 1,560 (patients 1,204, staff 356).

Artificial pneumothorax treatment was given to 121 cases during the year and 1,992 refills were given. Of a total of 77 discharged patients who had artificial pneumothorax, this form of treatment was to be continued on 30. Pneumo-peritoneum was commenced on 20 patients and 465 refills were given during the year.

Cases discharged with negative sputum numbered 88 (males 62, females 23 and children 3).

Six cases were transferred to the Thoracic Surgical Unit for thoracoplasty and three for extra-pleural pneumothorax.

Thoracoscopy was performed on 68 patients and phrenic crush on 27.

Mass Radiography. (*Report of Dr. B. A. Walsh.*)—Dr. Aspin ceased to be the Assistant Medical Director in November, 1947. Dr. Walsh was appointed Medical Director and took charge of the Unit in December, 1947.

During 1947 the Unit worked in Leeds until the middle of March. Visits were then made to York, Meltham and Spenborough and the Unit returned to Leeds on May 23rd, 1947. From August to December, surveys were carried out in Dewsbury, Hull, Beverley, Brough and Harrogate and the Unit returned to St. James's Hospital on December 22nd, 1947.

Three hundred miles were travelled in the course of the year and the equipment was re-erected and dismantled twenty-four times.

The total number X-rayed each year has differed. A maximum was reached in 1946, when 45,378 persons were examined.

After careful consideration, it was decided that this number was too great if miniature skiagrams of uniformly high quality were to be produced, and if sufficient time was to be made available for the proper follow-up of suspects. Therefore, it was felt that a reduced number should be X-rayed in 1947 and 35,267 people were examined, notwithstanding the very difficult conditions in industry in that year.

These conditions were the five-day week, the severe winter, staggered hours, power cuts, fuel shortages and the consequent less enthusiastic co-operation of employers.

Cases whose miniature films were found to be abnormal had full-size films taken, and after an interview with the Assistant Medical Director, those who were found to be in need of further investigation or treatment were referred to their private doctors and to the appropriate specialists. The Service worked throughout in the closest co-operation with the local Tuberculosis Officers to whom suspected cases of tuberculosis were referred for observation or treatment. A summary of this work is presented below in tabular form. The bulk of the cases of non-tuberculous disease were suffering from heart trouble.

SUMMARY OF WORK OF MASS RADIOGRAPHY UNIT, 1947.

	No. of persons examined	Subsequent examinations on large films	Cases of Tuberculosis referred to Dispensaries or Doctors :—		Non-tuberculous Disease Cases referred to Doctor
			For Observation	For Treatment	
Leeds Cases ..	10,973	752 (6·85%)	102 (0·93%)	16 (0·14%)	175 (1·59%)
Out-of-City Cases ..	24,294	1,941 (7·99%)	261 (1·07%)	58 (0·24%)	358 (1·47%)
Total	35,267	2,693 (7·64%)	363 (1·03%)	74 (0·21%)	533 (1·51%)
1946 Total ..	45,378	3,549 (7·82%)	499 (1·10%)	88 (0·19%)	363 (0·80%)

Follow-up of work done in 1947.—The following report is based upon a study of all cases of suspected tuberculosis referred to the City of Leeds Health Clinic by the Mass Radiography Service in 1947.

Of the 10,973 persons examined by the Mass Radiography Service in the City of Leeds, preliminary investigations revealed that 118 of these (10·7 per 1,000) could be suspected of suffering from pulmonary tuberculosis. These cases were then referred to the City of Leeds Health Clinic where after further observation and investigations it was considered that 50 (29 males and 21 females) had no serious trouble and required no further action. Fifty-two persons (33 males and 19 females) are still under observation at the Health Clinic.

ANALYSIS OF 118 CASES OF SUSPECTED PULMONARY TUBERCULOSIS

Sex	Active	Inactive
Male	11	62
Female	5	40

DISPOSAL OF 102 CASES OF INACTIVE PULMONARY TUBERCULOSIS

Sex	Requiring observation	Requiring no further action
Male	33	29
Female	19	21

The remaining 16 persons have now been notified by the Chief Clinical Tuberculosis Officer as new cases of pulmonary tuberculosis. This constitutes a rate of 1.5 notifiable cases of pulmonary tuberculosis per 1,000 apparently healthy examinees. The sputum has been found to contain tubercle bacilli in five of these cases so far. Thus one person in every 2,000 of those originally X-rayed has been found to be a previously unsuspected source of infection to his family and to his workmates.

TYPE OF DISEASE DISCOVERED.

Minimal	Mod. advanced	Advanced
7 (0) +	8 (4) +	1 (1) +

+ = positive sputum.

The average age of newly-discovered male cases was 37 years and of female cases 18 years. Two cases had a family history of pulmonary tuberculosis. Eleven cases had no relevant history of previous illnesses and five cases had previous history of "bronchitis."

At the time of discovery, five cases had no symptoms whatsoever, 7 cases had slight cough and sputum, two cases had blood-stained sputum and two cases had pains in the chest.

Treatment.—Of the 16 notified cases of pulmonary tuberculosis, eight have been recommended for admission to sanatorium. Three of these have now completed their period of sanatorium treatment, two are at present in sanatoria and three others are still awaiting admission. Of the remainder, eight have not so far been recommended for sanatorium treatment. In six of these the disease appears to be quiescent and they require, mainly, general advise and regular supervision at the Health Clinic. In two, the evidence of activity has been slight, and a short period of bed rest at home appears to have kept the disease in check. These two cases have now returned to work, but remain under constant supervision at the Health Clinic.

DISPOSAL OF 16 NOTIFIED CASES OF PULMONARY TUBERCULOSIS

Dispensary Supervision only	Requiring bed rest at home only	Received admission to Sanatoria
6	2	8

Details of Individual Surveys.—The following report gives details of the areas visited. Many extremely successful public sessions were held and volunteers unavoidably had to be turned away in Hull and Harrogate. The following table shows the numbers examined in the various areas.

Area	No. of Persons examined	Remarks	
Leeds	10,973	General public.	Industrial workers. Students.
York	2,805	General public.	Industrial workers. Students.
Meltham	986		Industrial workers.
Spenborough	2,266	General public.	Industrial workers.
Dewsbury	2,553	General public.	Industrial workers.
Hull	5,141	General public.	Industrial workers. Corporation staffs. Students.
Beverley	1,649	General public.	Industrial workers.
Brough	1,306	General public.	Industrial workers.
Harrogate	7,588	Industrial workers.	Civil Servants. Corporation and County Council staffs. Students.

Exhibitions showing Mass Radiography were displayed in York, Leeds and Harrogate.

In conclusion, thanks are due to the Directors, Managers and key personnel of the various industrial concerns for their co-operation and support during the year.

Acknowledgments are also due to the Chief Clinical Tuberculosis Officer and to the staff of the City of Leeds Health Clinic for their courtesy and help in tracing records.

Finally, the staff of the Mass Radiography Unit are thanked for their loyalty and devotion to duty.

Maternity and Child Welfare Services

BY

C. M. GRAY, M.B., Ch.B., D.P.H., *Assistant Medical Officer of Health for Maternity and Child Welfare.*

Statistics.—*Infant Mortality.*—The number of children under one year of age who died in 1947 was 552 (males 312, females 240) as compared with 401 (males 233, females 168) in 1946. The infant mortality rate was 51 as compared with 41 for the previous year and an average of 49 for the previous five years.

The rate for England and Wales was 41 or 19·6 per cent. less than the rate for Leeds and the rate of the 126 great towns was 47 or 7·8 per cent. less.

Causes of Death.—The principal causes of death of infants under one year of age during the year in order of numerical importance were diarrhoea and enteritis 121 (21·9 per cent.), premature birth 118 (21·4 per cent.) and pneumonia 90 (16·3 per cent.). The respiratory group of diseases was responsible for 112 or 20·3 per cent. of the total deaths under one year of age. Last year the number was 96 or 23·9 per cent. and the average for the previous five years 94 or 23·6 per cent. The death-rate from prematurity per thousand births was 10·9 as compared with 10·6 for the previous year.

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

Causes of death	Year 1946	Year 1947	Increase or decrease	Percentage total deaths under one
Cerebro-spinal (Meningo-coccal) Meningitis ..	3	4	+1	0·72
Whooping Cough ..	9	9	..	1·63
Diphtheria	1	..	-1	..
Tuberculosis of Meninges and Central Nervous System	2	3	+1	0·54
Tuberculosis of Intestines and Peritoneum ..	..	..	..	..
Other Tuberculous Diseases ..	1	..	-1	..
Congenital Syphilis ..	..	1	+1	0·18
Influenza	2	1	-1	0·18
Measles .. ..	..	6	+6	1·09
Hæmorrhagic conditions ..	..	..	..	..
Meningitis (non-Meningo-coccal)	4	5	+1	0·91
Convulsions	5	2	-3	0·36
Diseases of the Ear and Mastoid Antrum ..	1	3	+2	0·54
Bronchitis	6	10	+4	1·81
Pneumonia	76	90	+14	16·30
Other Respiratory Diseases ..	3	2	-1	0·36
Inflammation of the Stomach .. ..	..	..	..	..
Enteritis and Diarrhœa ..	52	121	+69	21·92
Hernia, Intestinal Obstruction	5	4	-1	0·72
Congenital Malformations ..	36	59	+23	10·69
Congenital Debility ..	6	9	+3	1·63
Premature Birth	105	118	+13	21·38
Injury at Birth	17	19	+2	3·44
Asphyxia, Atelectasis ..	31	24	-7	4·35
Other diseases peculiar to the first year of life ..	5	14	+9	2·54
Suffocation in bed or not stated how	19	19	..	3·44
Lack of care for the newborn	1	3	+2	0·54
Other causes	11	26	+15	4·71
Totals	401	552	+151	..

PERCENTAGE CHANGES (5 YEAR PERIODS, ALSO YEARS 1945, 1946 AND 1947) IN THE INFANT DEATH-RATE
per 1,000 BIRTHS AS COMPARED WITH THE AVERAGE OF THE FIVE YEARS 1905-1909.

	Under one week		Under one month		One and under three months		Three and under six months		Six and under nine months		Nine and under 12 months		Under one year	
	Five year period	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	Percentage increase or decrease over 5 years period 1905-1909	Rate	
1905-1909	26.2	—	44.3	—	25.5	—	28.0	—	23.0	—	18.6	—	13.9	—
1910-1914	26.6	+1.5%	44.1	-0.5%	24.7	-3.1%	23.9	-14.6%	20.1	-12.6%	18.0	-3.2%	13.1	-5.8%
1915-1919	26.4	+0.8%	44.4	+0.2%	21.5	-15.7%	25.0	-10.7%	19.7	-14.3%	17.9	-3.8%	12.9	-7.2%
1920-1924	23.8	-9.2%	42.3	-4.5%	17.9	-29.8%	16.1	-42.5%	13.2	-42.6%	11.6	-37.6%	10.1	-27.3%
1925-1929	24.3	-7.3%	38.2	-13.8%	15.1	-40.8%	13.4	-52.1%	11.5	-50.0%	10.1	-45.7%	8.8	-36.7%
1930-1934	26.1	-0.4%	35.8	-19.2%	12.9	-49.4%	10.6	-62.1%	9.5	-58.7%	7.8	-58.1%	7.7	-44.6%
1935-1939	23.3	-11.1%	31.9	-28.0%	10.5	-58.4%	9.5	-66.1%	6.6	-71.3%	4.9	-73.7%	6.3	-54.7%
1940-1944	20.3	-22.5%	27.9	-37.0%	9.0	-64.7%	7.9	-71.8%	5.3	-77.0%	3.2	-82.8%	5.3	-61.9%
Year 1945	19.5	-25.6%	28.6	-35.4%	12.0	-52.9%	8.4	-70.0%	4.4	-80.9%	3.1	-83.3%	5.6	-59.7%
Year 1946	17.6	-32.8%	23.8	-46.3%	8.0	-68.6%	4.1	-85.4%	2.5	-89.1%	2.1	-88.7%	4.1	-70.5%
Year 1947	16.4	-37.4%	25.6	-42.2%	11.5	-54.9%	8.0	-71.4%	3.8	-83.5%	1.9	-89.8%	5.1	-63.3%

INFANTILE MORTALITY DURING THE FOURTEEN YEARS 1934-1947 AT DIFFERENT PERIODS OF
THE FIRST YEAR OF LIFE.

YEAR.	Births in year.	Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.		
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	
1934	..	7,190	185	25.7	252	35.0	85	11.8	55	7.6	69	9.6	52	7.2	513	71
1935	..	7,211	182	25.2	239	33.1	88	12.2	62	8.6	41	5.7	33	4.6	463	64
1936	..	7,340	166	22.6	220	30.0	70	9.5	87	11.9	54	7.4	45	6.1	476	65
1937	..	7,279	186	25.6	242	33.2	84	11.5	80	11.0	48	6.6	37	5.1	491	67
1938	..	7,614	170	22.3	252	33.1	75	9.9	69	9.1	55	7.2	39	5.1	490	64
1939	..	7,979	149	21.0	214	30.2	66	9.3	50	7.1	44	6.2	27	3.8	401	57
1940	..	6,946	157	22.6	214	30.8	70	10.1	48	6.9	39	5.6	24	3.5	395	57
1941	..	6,667	123	18.4	178	26.7	69	10.3	75	11.2	41	6.1	44	6.6	407	61
1942	.	7,204	154	21.4	214	29.7	58	8.1	49	6.8	31	4.3	17	2.4	369	51
1943	..	7,547	139	18.4	179	23.7	58	7.7	62	8.2	43	5.7	14	1.9	356	47
1944	..	8,518	177	20.8	242	28.4	75	8.8	55	6.5	42	4.9	15	1.8	429	50
1945	..	7,760	151	19.5	222	28.6	93	12.0	65	8.4	34	4.4	24	3.1	438	56
1946	..	9,886	174	17.6	235	23.8	79	8.0	41	4.1	25	2.5	21	2.1	401	41
1947	..	10,875	178	16.4	278	25.6	125	11.5	87	8.0	41	3.8	21	1.9	552	51

Prematurity.—The following table shows the number of deaths from prematurity and the death-rate per thousand births for the years 1932-1947:—

Year.	Births.	Deaths from prematurity.	Death-rate per 1,000 births.
1932	7,004	128	18·3
1933	6,643	134	20·2
1934	7,190	121	16·8
1935	7,211	124	17·2
1936	7,340	114	15·5
1937	7,279	120	16·5
1938	7,614	136	17·9
1939	7,079	102	14·4
1940	6,946	97	14·0
1941	6,667	83	12·4
1942	7,204	91	12·6
1943	7,547	91	12·1
1944	8,518	119	14·0
1945	7,760	87	11·2
1946	9,886	105	10·6
1947	10,875	118	10·9

The average death-rate from prematurity per thousand births for the ten years 1937-1946 was 13·5.

There were 519 births notified as premature. Of these 410 were born in hospitals or nursing homes and 109 at home. The number of infants who died within 24 hours of birth was 36 and within the first month 98.

Deaths in Age Groups.—Of the total (552) infant deaths 87 or 15·8 per cent. took place on the first day; 178 or 32·2 per cent. in the first week; 278 or 50·4 per cent. in the first month; 125 or 22·6 per cent. between one and three months; 87 or 15·8 per cent. between three and six months; 41 or 7·4 per cent. between six and nine months; and 21 or 3·8 per cent. between nine and twelve months.

The percentage changes in the infant death-rates per thousand births in 1947 as compared with the previous ten years are as follows:—

Under 1 week decrease	20·8%	3-6 months increase	2·6%
Under 1 month "	10·8%	6-9 " decrease	28·3%
1-3 months increase	21·1%	9-12 " "	44·1%
Whole year decrease, 7·0%			

Neo-Natal Death-rate.—The number of deaths of infants occurring in the first month of life was 278 or 43 more than in the previous year and the neo-natal death-rate was 25·6 as compared with 23·8 in 1946.

Of the total deaths under one year 50·4 per cent. occurred in the first month as compared with 58·6 per cent. for the previous year and of the deaths in the first month 31·3 per cent. occurred on the first day, 64·0 per cent. in the first week and 73·0 per cent. in the first two weeks.

The deaths in the first month were largely due to prematurity.

Stillbirths.—Details are given on page 3 of stillbirths and the stillbirth rate.

The number of stillbirths notified in 1947 was 361 or 3·1 per cent. of the total births notified, as compared with 377 or 3·7 per cent. in 1946.

Illegitimate Death-rate.—Of the 699 illegitimate births, 62 or 8·9 per cent. died before reaching the age of one year which is equal to an infant mortality rate of 89. The corresponding rate for 1946 was 51 and for 1945 78.

Puerperal Pyrexia.—There were 91 notifications of which 25 (estimated) were true sepsis. Of the latter, six were midwives' cases and 19 occurred in institutions.

Maternal Mortality.—The number of mothers who lost their lives in childbirth during the year was nine, a decrease of three as compared with the figure for the previous year. The corresponding maternal mortality rate per thousand live births was 0·83 as compared with 1·21 for the previous year and an average of 1·86 for the previous five years. Calculated on the total number of births (live and still) the rate for the year was 0·81 as compared with 1·18 for the previous year and an average of 1·80 for the previous five years.

The causes of death were as follows: sepsis 1; toxæmia 3; embolism 1; other causes 4. The number who attended Health Department ante-natal clinics was five.

Number of Midwives.—The total number of midwives on the register on 31st December, 1946, was 127. During the year 63 new names were added, four midwives retired, five left the district and 25 failed to notify, leaving a total of 156 on the register on 31st December, 1947.

The total number of domiciliary births notified by the midwives was 3,688 or 31·6 per cent. of the total births notified, as compared with 3,262 or 31·8 per cent. for the previous year.

Municipal Midwifery Service.—During the year 36 Municipal Midwives were employed directly by the Authority. For the district training of medical students six midwives were employed by the Maternity Hospital.

The following table gives details of the work done by the Municipal domiciliary and Maternity Hospital district midwives:

MUNICIPAL MIDWIVES.

	Municipal Midwives	Maternity Hospital Midwives	Total
Ante-natal visits	16,009	2,930	18,939
Deliveries { Midwife	3,027	492	3,519
{ Maternity Nurse ..	368	20	388
Post-natal visits	57,339	7,641	64,980
Bookings { Midwife	2,501	558	3,059
{ Maternity Nurse ..	277	27	304
Attendances { at Midwife's home by patients { at Midwife's clinic	5,290 1,392	3,512 853	8,802 2,245
Number of Midwives	36 full-time 1 part-time	6	43

Supervision of Midwives.—During the year the Municipal Midwives were interviewed at the Health Department once a week by the Lay Supervisor, who paid 198 routine visits of inspection to their homes, with, in addition, 158 special visits.

Part II Midwifery Training.—On 1st January, 1947, there were 17 pupil midwives in training at the district training school at Redcourt Hostel. During the year 38 completed training. Of these 33 passed Part II of the Central Midwives' Board examination, four failed to pass and one did not take the examination. On 31st December, 1947, there were 23 pupils in training.

Medical Assistance.—Notifications of having advised medical assistance were received in 1,432 domiciliary midwifery cases and in 78 institutional cases.

For attendance on emergencies under Section 14 of the Midwives' Act, 1918, there were 1,143 claims made by medical practitioners.

Nursing in the Home.—There were 1,526 Maternity and Child Welfare cases referred to the Leeds District Nursing Association during the year.

Home and Domestic Helps.—During the year there were 12 Home Helps in full-time employment. A Home Help was provided for 205 Maternity and Child Welfare cases and for nine other cases.

Ante-Natal Work.—Expectant mothers attending the ante-natal clinics during the year numbered 11,990, a decrease of 232 on the figure for 1946. Of the total, 7,760 were new cases. The total attendances at all the ante-natal clinics were 40,147 as compared with 43,659 for 1946. The large number of cases attending the clinics is partly accounted for by the arrangements made whereby all mothers wishing to book hospital accommodation for their confinement must do so through the ante-natal clinics, and partly by the increased demands for hospital accommodation.

Births in Institutions.—Of 11,673 notified births which occurred during the year, 7,136 or 61.1 per cent. took place in hospitals or nursing homes in the city. In 1946 the percentage was 64.8.

The number of cases admitted to Emergency Maternity Hospitals during 1947 was 141 as compared with 304 in 1946.

Registered Nursing Homes.—The following table gives details of registered nursing homes in the city :—

REGISTERED NURSING HOMES IN THE CITY.

	Maternity		Maternity and General.		General.		Total.				
	Homes.	Beds.	Homes.	Beds.		Homes.	Beds.	Homes.	Beds.		
				Mat'y.	Gen.						
On register, 31st Dec., 1946 ..	9	105	*	4	30	17	9	146	22	135	163
Registered during 1947 ..	1	17	..	..	..	..	2	1	17	2	
Registration cancelled or surrendered during 1947 ..	2	28	..	..	..	..	1	14	3	28	14
On register 31st Dec., 1947 ..	8	94	4	30	17	8	134	20	124	151	

Nurses Act, 1943, Part II.—Agencies for the supply of Nurses.—Under this Act four nursing agencies applied for registration in January, 1947, and were issued with licences.

Specialist Services.—The number of claims from consultants for services rendered in connection with the Corporation's Maternity Scheme was 33.

Home Visiting.—The total number of visits paid by the Health Visitors during 1947 amounted to 110,712. This is an increase of 3,692 on the total for 1946.

A complete summary of the work of the Health Visitors is as follows :—

	VISITS.
Notified births including re-visits	89,817
Stillbirths and deaths under one month including re-visits	276
Investigations into the deaths of children from one month to five years	566
Ophthalmia Neonatorum	50
Expectant Mothers	3,797
Special visits (medical aid claims, infectious diseases, etc.)	3,284
Sick children notified from Leeds General Infirmary, Public Dispensary and St. James's Hospital	24
Infant Life protection	396
Ineffectual visits	12,044
Adoption of Children (Regulation) Act, 1939 :—	
Homes inspected	125
Visits to children placed for adoption ..	333
 Total visits for the year	 110,712

Eye Defects.—Children classified as Blind or Partially Blind.—There were eight children on the register on 1st January, 1947. During the year two children were notified, five were transferred to the Education Authority on reaching the age of 5 years, one child was admitted to a Sunshine Home, making a total of four cases on the register at the end of the year. Of these, three were suffering from a congenital eye defect and one from a growth in the eyes.

Infant Life Protection.—During the year a total of 396 visits were paid to foster children by Health Visitors and the Superintendent. The following table gives particulars of the children nursed for reward during 1947.

INFANT LIFE PROTECTION.

PUBLIC HEALTH ACT, 1936. Part vii. Sec. 206-219.

CHILDREN NURSED FOR HIRE OR REWARD DURING THE YEAR 1947.

MOTHERS.

Number of foster-mothers on the register at the beginning of the year	35
Number of foster-mothers on the register at the end of the year	32
Foster-mothers with one child	28
Foster-mothers with two children	2
Foster-mothers with three children	1
Foster-mothers with eleven children	1

CHILDREN.

Number of children on the register at the beginning of the year	54
Number of children placed on the register during 1947	25
Number of children who ceased, during the year, to come under the provision of this Act	33
Number of children transferred to other foster mothers	1
Number of children on the books at the end of the year	45

DETAILS OF THE NUMBER OF CHILDREN WHO CEASED, DURING THE YEAR, TO COME UNDER THE PROVISIONS OF THE PUBLIC HEALTH ACT, 1936.

Returned to parents or relatives..	21
Attained the age of 9 years	6
Adopted without payment	4
Sent to special homes, etc.	1
Moved out of the district—no trace	1
Died .. .. .. .. ..	..
TOTAL	33

Adoption of Children (Regulation) Act, 1939.—Children placed through the Health Department with a view to adoption during 1947 numbered 50. In 44 cases adoption was completed during the year. Of these, eight had been placed for adoption during 1946. The comparative figures for 1946 were 64 and 47.

Infant Welfare Centres.—There were 20 Infant Welfare Centres in use during 1947.

Attendances.—The number of new babies under one year registered at the infant clinics during the year was 7,336; between one and two years 368; and between two and five years 683. These figures show an increase of 1,030 infants under one year, and a decrease of 37 children between one and five years. The total number of names on the register at the beginning of 1947 was 12,390. With 8,387 new children registered and 7,252 names removed of children who had reached the age of 5 years, defaulted or left the district, the total at the end of the year was 13,525.

There were 106 deaths of children between the ages of two weeks and one year who had attended the clinics, as compared with 349 for the city; the corresponding infant mortality rates were 14 and 33.

Central Clinic.—*Dental.*—New patients numbering 911 received treatment during the year. Of these 625 were expectant mothers, 164 mothers and 122 children. The total number of treatments was 10,237; expectant mothers 5,225; mothers 4,599; children 413; an increase of 58 on the previous year. Full dentures were supplied in 157 cases, partial dentures in 125. In addition, eight remodels and 38 repairs were completed.

Orthopædic.—A total of 255 children was seen at the Clinic during the year, a decrease of 47 on the number for 1946. Nine cases were recommended to the General Infirmary for treatment and three were admitted to the Marguerite Home, Thorp Arch.

Appliances were supplied to three cases.

Massage.—A total of 7,478 treatments was given during the year, a decrease of 236 on the figure for 1946. There were still only three instead of five full-time physiotherapists.

Artificial Sunlight.—This continued to be given at Central Clinic, Middleton, Holbeck and Armley Clinics. The total number of children treated during the year was 871 and the total treatments given 15,879, a decrease of 247 and 2,069 respectively on the numbers for 1946.

Venereal Diseases.—The number of patients attending this Clinic during the year was 102 compared with 241 for 1946. Of these, three were expectant mothers, 35 mothers and 64 infants, the latter attending for routine blood test for adoption. As expectant mothers are now referred to a special clinic at the Maternity Hospital this accounts for the small number attending the above clinic.

Almoning Committee.—This Committee met on 50 occasions and considered 2,353 cases, an increase of 305 on the number for 1946.

Food Supplements.—Under the Government Scheme, National Dried Milk for infants has continued to be distributed at Infant Welfare Centres as well as Vitamin preparations for expectant mothers and children under five years. The potential take-up of orange juice was 41·45 per cent., of cod liver oil 39·68 per cent., and of Vitamins A and D 52·87 per cent. The comparative figures for 1946 were 46·64 per cent., 31·85 per cent., and 51·74 per cent.

Convalescent Treatment for Mothers and Children.—Convalescence was arranged for 19 mothers and 21 babies and for 13 mothers without their children.

Infants' Hospital.—The Infants' Hospital was closed on 31st October, 1947, as the premises at Bishop Cowgill Institute were de-requisitioned and could no longer be used as a hospital.

There were 24 children in the hospital on 1st January, 1947. During the year 37 children were admitted and 61 discharged.

Wyther Hostel.—On 1st January, 1947, there were seven mothers and 11 babies in residence. During the year 44 mothers and 35 babies were admitted, of these 20 mothers were admitted for antenatal care and 13 babies were admitted as emergency cases without mothers. Of the 37 mothers discharged, 16 kept their babies, 11 babies were placed with a view to adoption, six babies died in hospital and one in the home, four mothers did not return after the birth of the baby. Seven of the babies who had been admitted without mothers were discharged home and one to an institution.

On 31st December, 1947, there were 15 mothers and 17 babies remaining in the home.

Residential and Day Nurseries.—The following table gives particulars of children admitted to Residential and Day Nurseries during the year :—

RESIDENTIAL NURSERIES.				
Name of Nursery.	Accommodation	Average No. of beds occupied (weekly).	Total Number Attendances	
Spring Bank	60	53·0	19,345	
DAY NURSERIES.				
Blenheim	50	38·5	10,787	
Quarry Hill	35	29·3	8,197	
East Street	35	30·7	8,567	
Jack Lane	50	37·7	10,516	
Burley Park	35	30·7	8,583	
Middleton	35	27·2	7,538	
Meanwood	35	30·8	8,613	
Rookwood	35	29·4	8,232	
Armley	35	28·7	8,078	
Low Road	35	31·7	8,903	
Bramley	35	27·7	7,737	
Sheepscar	35	28·1	7,830	
York Road	50	42·0	11,751	
Crossgates	50	36·5	10,252	

Municipal Laboratory

BY

C. H. MANLEY, M.A., F.R.I.C., *City Analyst.*

The following is a summary of the analyses made during 1947:—

Samples submitted by inspectors under the Food and Drugs Act, 1938, and Defence (Sale of Food) Regulations, 1943	2,292
Samples submitted by inspectors under the Fertilisers and Feeding Stuffs Act, 1926	14
Samples submitted by inspectors under the Rag Flock Acts, 1911 and 1928	2
Samples analysed for various Corporation Departments, Institutions, etc.	1,617
Total	3,925

FOOD AND DRUGS.

The table on pages 123, 124, 125 and 126, summarises the samples taken under the Food and Drugs Act, 1938, and the Defence (Sale of Food) Regulations, 1943.

The percentage of adulteration was 6·5 compared with 7·6 for 1946.

A second table on pages 134 and 135 lists the summonses issued respecting those adulterated samples concerning which legal proceedings were considered justified.

Milk.—Of the 1,937 samples analysed, 125 (6·5 per cent.) were unsatisfactory. Of these 91 contained added water, 27 were fat deficient, six showed both added water and fat deficiency and one contained broken glass.

The greatest proportion of added water found in any milk procured by the Sampling Officers was 20 per cent., and the greatest fat deficiency was 45 per cent. in a formal sample and 72 per cent. in an informal sample.

It is perhaps worth pointing out that, whilst the presence of 20 per cent. (and upwards) of added water obviously constitutes gross adulteration, the presence of say, 8 per cent. may not appear to be altogether serious, until it is appreciated that in the case of one 12-gallon churn alone this represents no less than one gallon of added water. Accordingly, in such instances, the amount as well as the percentage of added water is stated on the certificate.

The average composition of all the samples examined was as follows, the corresponding figures for 1946 and 1939 being given for comparison :—

		1947.	1946.	1939.
Non-fatty Solids	..	8·67%	8·65%	8·78%
Fat	.. ..	3·67%	3·77%	3·71%
Total Solids	..	<u>12·34%</u>	<u>12·42%</u>	<u>12·49%</u>

Almond Substitute (1).—No. 372L.—This powder consisted of an almond flavoured mixture of equal parts of soya flour and wheat flour, with an oil content of only 12 per cent., as compared with about 50 per cent. in ground almonds. It was considered that an almond substitute should contain at least 20 per cent. oil, an objective attainable by using flavoured soya or peanut flour or a mixture of these with or without wheat flour. No proceedings were instituted owing to it being found that the product was being manufactured under a Ministry of Food licence. On representations being made to the Ministry, it was learnt that it was never intended that the product should be available to the public through the medium of retail sales. Agreement was subsequently reached with the manufacturer concerned to describe it in future as “Bakers’ Filler—Almond Flavour.”

Brawn (3).—One sample (No. 687H) was very soft, owing its lack of consistency to an unusually high proportion of water, viz., 79 per cent. It also contained 2·5 per cent. bread, an ingredient not normally associated with brawn. As against its low meat and gelatine content of 62·5 per cent., the other two samples submitted contained 77 and 80 per cent., respectively. No action was taken.

Cherrum (1).—No. 649L.—This was a drink containing, in accordance with the formula, 1·0 per cent. iron ammonium citrate, 10·5 per cent. proof spirit (= 6 per cent. alcohol) in solution with a wholesome bitter, a chloroform flavouring and certain other ingredients. According to the label it was an excellent cocktail. In this particular the label was considered false, since a genuine cocktail contains at least 40 per cent. proof spirit (= 23 per cent. alcohol). Following its certification, application was accordingly made to the Ministry of Food in September for permission to proceed against the vendor under Section 1 of the Defence (Sale of Food) Regulations, 1943, but the decision of the Ministry was still awaited at the close of the year.

Cocoa (12).—Eleven formal samples were satisfactory, but one informal sample (No. 137L) was somewhat damp (moisture content = 11·5 per cent. instead of 4·8 per cent.) with a growth of mould upon its surface. It also had an unpleasant taste. Accordingly, verbal representations were made to the vendor.

Coffee (11).—One formal sample (No. 446H) was adulterated with 20 per cent. chicory. The retailer was sent a warning letter and agreed to withdraw the outstanding stock. This case was exceptional in that it constituted the first instance experienced in 20 years of a coffee and chicory mixture being sold as coffee to a Leeds Sampling Officer.

Egg Substitute Powder (1).—No. 806H.—This contained only 2·85 per cent. available carbon dioxide instead of the minimum of 6·0 per cent. required in its present day equivalent, Golden Raising Powder (deficiency in aeration value = 52·5 per cent.). This case was similar to the 1946 one (No. 347H). On verbal representation being made, the retailer agreed to withdraw his remaining stock from sale.

Fish Paste (2).—Of the two samples of salmon paste analysed, one (No. 109H) contained only 55 per cent. fish, as compared with a normal 65—70 per cent. content (15·4 to 21·4 per cent. deficient). A warning letter was sent.

Ice Cream (5).—One informal sample (No. 8G) contained only 0·16 per cent. fat (98 per cent. deficient on an unofficial 8 per cent. basis). The remainder contained between 6·0 and 9·8 per cent. and were classified as satisfactory.

Jam (9).—One formal sample of raspberry jam (No. 659H) contained only 15 per cent. fruit instead of at least 20 per cent. as required by the Food Standards (Preserves) Order, 1944, this representing a 25 per cent. fruit deficiency. No proceedings were instituted, but a repeat sample (No. 911H) was taken two months later, and this proved satisfactory (fruit = 24 per cent.).

Full Cream Dried Milk (2) Informal.—Following a householder's complaint that two tins of National Dried Milk contained mouse dirt, the contents were examined and each found to contain a number of dark grains, about fifty of which were isolated from tin No. 105L, which was nearly full. The grains were definitely not mouse dirt, but appeared to be small seeds (unidentified). The Divisional Office of the Ministry of Food undertook the further investigation of the matter, but failed to find any evidence that the fault lay either with the manufacturer or the packer, stating that examination of tins opened for check purposes revealed no contamination of the powder.

Dried Mint (3).—All were returned as unsatisfactory, Nos. 932H and 990H (informal) containing no essential oil, being therefore useless for either flavouring vegetables or making mint sauce, and No. 1050L containing only 0·3 per cent. essential oil, instead of at least 0·6 per cent. (A good specimen contains about 1 per cent.). Proceedings were instituted in respect of No. 932H, the retailers pleading warranty and bringing in their wholesalers, who, however, did not see fit in turn to bring in their suppliers. The cardboard containers were marked "Foreign Produce." The analytical findings were not challenged, but each defendant company was discharged, no costs however being awarded to either firm. As far as is known, this is the first case of its kind to have been before the Courts.

Mustard (3).—One sample (No. 100H), which contained an insufficient ratio of black to white mustard seeds, lacked 43 per cent. of the statutory pungency required by the Food Standards (Mustard) (No. 2) Order, 1944. The retailer had only, shortly before the sale of this mustard, taken over the business from another man, and was unable to trace the manufacturer. He received a warning letter and agreed to withdraw his outstanding stock.

Dried Parsley (6).—Three of these contained excessive amounts of extraneous mineral matter. Proceedings were successfully instituted in respect of two of these (Nos. 384H and 977L) containing respectively 20 per cent. and 10 per cent. small stones and grit. The parsley had obviously not been washed free from soil before being dried.

Dried Sage (4).—One of these (No. 979L) contained 5 per cent. small stones and grit.

Sausages (3).—One of these (No. 79H) contained only 40 per cent. beef instead of the recognised 47·5 to 50 per cent. (16 to 20 per cent. deficient). The vendor was warned.

Vinegar (1).—This sample sold simply as "Vinegar" proved to be an artificial product. The wholesalers were requested to label future barrels either "Artificial Vinegar" or "Non-brewed Vinegar" so as to leave the retailer in no doubt as to the nature of the article being sold.

Whiskey (6).—Two of these were 40·6° and 40·0° respectively under proof, these figures corresponding to 8·6 per cent. and 7·7 per cent. added water. Proceedings were successfully instituted in each case, but in both instances a person other than the licensee was held by the Court to be the guilty party.

Refined Oil (1).—No. 804L. This was adversely reported upon. It was exposed for sale in a pharmacist's shop, with an attached card bearing the words "absolutely pure." It was colourless and would ordinarily be regarded as a brand of medicinal paraffin, but there was reason to believe that it was being sold for confectionery purposes in place of fat as a binding agent. It proved to be a liquid paraffin intermediate in specific gravity between Liquid Paraffin B.P. and Light Liquid Paraffin B.P.C. As it failed on the sulphuric acid B.P. test, it was considered unsatisfactory for internal use. The vendor stated that by the Ministry of Fuel and Power it was classified as "No. 30 Pool Mineral Oil." He agreed to withdraw it from sale.

The remainder of the samples were classified as satisfactory. The existence of food standards and labelling of food orders both benefits the public and assists the analyst, and it is not necessarily true that standardisation results in the introduction of the minimum percentage of the essential ingredient named in the particular order. For instance, the available carbon dioxide found in the baking powders examined ranged from 8 per cent. (minimum requirement) to 15 per cent., and that in the golden raising powders from 12 to 14 per cent. (minimum requirements = 6 per cent.). Official standards for the various forms of vinegar are still lacking, despite the findings, published in 1944, of the Inter-Departmental Committee on Food Standards. The position as regards the fat content of ice cream is still unsatisfactory, and only well known brands can be relied upon to possess an 8 per cent. minimum. Furthermore, a serious anomaly respecting the sale of sausages requires removal, for whilst a maximum price is set both on pork sausages and beef sausages and a 50 per cent. minimum meat content insisted upon, no maximum price is laid down for sausages sold without qualification, and for these only a 30 per cent. minimum meat content is called for. So far as official sampling is concerned, however, the difficulty is being overcome by demanding either pork or beef sausages (usually beef in the present shortage of pork).

OTHER ANALYSES

In addition to the work undertaken in connection with the Fertilisers and Feeding Stuffs Act, 1926, and the Rag Flock Acts, 1911 and 1928, analyses have been made for the Waterworks Department, and investigations carried out for other Corporation Departments and for St. James's Hospital, as well as for the West Riding Regional Smoke Abatement Committee.

In conclusion, pending the appointment of a new official Deputy, my best thanks are due to my Chief Assistant, Mr. John Drinkall, B.Sc., and other members of my staff for their valued services and loyal co-operation during the year under review.

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1947.

Article.	No. examined.			No. adulterated.			Percentage adulteration.
	Formal	Informal	Total	Formal	Informal	Total	
FOOD :—							
Acetic Acid Essence ..	I	..	I	..	..	..	..
Almond Substitute ..	I	..	I	I	..	I	100·0
Apple ..	..	I	I	..	..	..	..
Arrowroot ..	2	..	2	..	..	..	..
Baking Powder ..	I4	..	I4	..	..	..	..
Baked Cereal ..	I	..	I	..	..	..	..
Barley ..	2	..	2	..	..	..	..
" Coarse Cut ..	I	..	I	..	..	..	..
" Crystals ..	I	..	I	..	..	..	..
" Flakes ..	I	..	I	..	..	..	..
" Flour ..	I	..	I	..	..	..	..
" Ground ..	I	..	I	..	..	..	..
" Kernels ..	I	..	I	..	..	..	..
" Pearl ..	2	..	2	..	..	..	..
Becona ..	I	..	I	..	..	..	..
Beer, Bitter ..	3	..	3	..	..	..	..
" Mild ..	3	..	3	..	..	..	..
Blackcurrant, Syrup ..	I	..	I	..	..	..	..
Brandy ..	I	I	2	..	..	..	..
*Brown ..	3	..	3	I	..	I	33·3
Browning, Handy ..	I	..	I	..	..	..	..
Bun Flour ..	4	..	4	..	..	..	..
Cake Mixtures (various) ..	6	..	6	..	..	..	..
Cherrum ..	I	..	I	I	..	I	100·0
*Chitterlings ..	I	..	I	..	..	..	..
Chocolate Cup ..	I	..	I	..	..	..	..
Cocoa ..	II	I	I2	..	I	I	8·3
Coffee ..	IO	I	I2	I	..	I	9·I
" and Chicory ..	3	I	4	..	..	..	..
Cooking Fat ..	..	I	I	..	..	..	..
Cornflour ..	I	..	I	..	..	..	..
*Cordial, Blackcurrant ..	I	..	I	..	..	..	..
*" " Ginger ..	I	..	I	..	..	..	..
Crunchets ..	I	..	I	..	..	..	..
Custard Powder ..	I	..	I	..	..	..	..
Egg Substitute Powder ..	I	..	I	I	..	I	100·0
*Fish Cake ..	4	..	4	..	..	..	..
Carried forward ..	89	6	95	5	I	6	..

* Tested for preservative.

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1947—continued.

Article.	No. examined.			No. adulterated.			Per-cent age adulteration.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	89	6	95	5	1	6	..
*Fish Paste, Salmon ..	2	..	2	1	..	1	50·0
Flour, Self Raising ..	3	..	3	..	..	..	..
Forcemeat ..	1	..	1	..	..	..	..
*Gelatine, Powdered ..	3	..	3	..	..	..	..
Ginger, Ground ..	7	..	7	..	..	..	..
Golden Raising Powder ..	4	..	4	..	..	..	..
Gravy, Browning ..	1	..	1	..	..	..	..
Salt ..	2	..	2	..	..	..	..
“Grox” Good Gravy Maker ..	1	..	1	..	..	..	..
Herbs, Mixed ..	1	..	1	..	..	..	..
Ices ..	..	47	47	..	..	..	..
Ice Cream ..	1	4	5	..	1	1	20·0
Jam ..	8	1	9	1	..	1	II·I
Jelly Cremes ..	1	..	1	..	..	..	..
Crystals ..	1	..	1	..	..	..	..
Dessert ..	1	..	1	..	..	..	..
Table ..	1	..	1	..	..	..	..
Junket Powder ..	1	..	1	..	..	..	..
Kali ..	..	1	1	..	..	..	..
Lard Compound ..	1	..	1	..	..	..	..
Lemonade Crystals ..	1	..	1	..	..	..	..
Powder ..	1	..	1	..	..	..	..
“Lingfo” Fizz Lemon ..	1	..	1	..	..	..	..
*Luncheon Roll ..	1	..	1	..	..	..	..
Mace, ground ..	1	..	1	..	..	..	..
Malt Cup ..	1	..	1	..	..	..	..
Malted Milk ..	2	..	2	..	..	..	..
Tablets ..	1	..	1	..	..	..	..
*Margarine ..	1	..	1	..	..	..	..
Mayonnaise ..	..	1	1	..	..	..	..
*Milk ..	1,915	22	1,937	116	9	125	6·5
Full Cream ..	..	2	2	..	2	2	100·0
Evaporated ..	..	1	1	..	..	..	..
Food, Full Cream ..	..	1	1	..	..	..	..
Mint ..	2	1	3	2	1	3	100·0
Mustard ..	3	..	3	1	..	1	33·3
Carried forward ..	2,059	87	2,146	126	14	140	..

* Tested for preservative.

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1947—continued

Article.	No. examined.			No adulterated.			Percentage adulteration.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	2,059	87	2,146	126	14	140	..
Noodle Squares ..	1	..	1	..	..	..	..
Nutmeg, Ground ..	1	..	1	..	..	..	..
Oatmeal ..	1	..	1	..	..	..	..
Onion, Dehydrated ..	1	..	1	..	..	..	..
Parkin Mixture ..	1	..	1	..	..	..	..
Parsley, Dried ..	5	1	6	2	1	3	50·0
Peanut Butter ..	..	1	1	..	..	..	..
Peas, Garden ..	1	..	1	..	..	..	..
Pepper ..	1	..	1	..	..	..	..
" Black ..	2	..	2	..	..	..	..
" Paprika ..	..	1	1	..	..	..	..
" White ..	9	..	9	..	..	..	..
*Pom ..	1	..	1	..	..	..	..
*Potted Meat ..	1	..	1	..	..	..	..
Pudding Mixtures (various) ..	8	..	8	..	..	..	..
*Raisins ..	1	..	1	..	..	..	..
Rum ..	2	..	2	..	..	..	..
Sage, Dried ..	4	..	4	1	..	1	25·0
Salad Oil ..	1	..	1	..	..	..	..
*Sausages ..	3	..	3	1	..	1	33·3
* " Pork ..	1	..	1	..	..	..	..
*Sausage Meat ..	5	..	5	..	..	..	..
Scone Flour Mixture ..	1	..	1	..	..	..	..
Semolina ..	5	..	5	..	..	..	..
" Soysem ..	1	..	1	..	..	..	..
Spaghetti ..	1	..	1	..	..	..	..
Sponge Mixture ..	3	..	3	..	..	..	..
Stuffing, Parsley and Thyme ..	2	..	2	..	..	..	..
" Sage and Onion ..	4	..	4	..	..	..	..
Table Dessert ..	1	..	1	..	..	..	..
Tea ..	10	..	10	..	..	..	..
Thyme, Rubbed ..	2	..	2	..	..	..	..
Vinegar ..	1	..	1	1	..	1	100·0
" Distilled ..	1	..	1	..	..	..	..
" Malt ..	19	..	19	..	..	..	..
Carried forward ..	2,160	90	2,250	131	15	146	..

* Tested for preservative.

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1947—Continued

Article.	No. examined.			No. adulterated			Percentage adulteration.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	2,160	90	2,250	131	15	146	..
Vinegar Non-brewed ..	3	..	3	..	..	..	..
,, Spirit ..	1	..	1	..	..	..	..
,, Tarragon ..	1	..	1	..	..	..	..
Vitacup ..	1	..	1	..	..	..	..
Wheat Flour ..	1	..	1	..	..	..	..
Whiskey ..	6	..	6	2	..	2	33.3
DRUGS :—							
All Fours ..	1	..	1	..	..	..	..
Aspirin Tablets ..	3	..	3	..	..	..	..
Back and Kidney Pills ..	1	..	1	..	..	..	..
Bicarbonate of Soda ..	1	..	1	..	..	..	..
Bisurated Magnesia ..	1	..	1	..	..	..	..
Blood Purifier ..	1	..	1	..	..	..	..
Blood and Stomach Pills ..	1	..	1	..	..	..	..
Bronchial Lozenges ..	1	..	1	..	..	..	..
,, Tablets ..	1	..	1	..	..	..	..
Cod Liver Oil Emulsion ..	2	..	2	..	..	..	..
Cream of Tartar ..	1	..	1	..	..	..	..
Epsom Salts ..	1	..	1	..	..	..	..
,, Tablets ..	1	..	1	..	..	..	..
Fever Mixture ..	1	..	1	..	..	..	..
Fruit Salt ..	1	..	1	..	..	..	..
Glycerine, Pure ..	1	..	1	..	..	..	..
“ Io-sen ” ..	1	..	1	..	..	..	..
Liver Salts ..	2	..	2	..	..	..	..
Lung Syrup ..	1	..	1	..	..	..	..
“ Maltvita ” Tonic ..	1	..	1	..	..	..	..
Refined Oil ..	1	..	1	1	..	1	100.0
Rheumatic Tablets ..	1	..	1	..	..	..	..
Saccharin Tablets ..	1	..	1	..	..	..	..
“ Vironita ” ..	1	..	1	..	..	..	..
Vitagrains ..	1	..	1	..	..	..	..
Total ..	2,202	90	2,292	134	15	149	6.5

Sanitary Circumstances

With comments on the following matters :—

- Meat Inspection .
- Milk Supplies
- Food and Drugs
- Ice-cream
- Diseases of Animals
- Factories
- Housing
- General Sanitation

BY

JAMES GOODFELLOW, M.R.San.I., A.M.I.S.E.,
Chief Sanitary Inspector.

MEAT INSPECTION

Slaughter-houses.—The slaughter-house belonging to the Leeds Industrial Co-operative Society continued to be used as a slaughterhouse by the Ministry of Food, but, of the remaining slaughterhouses, only two were used for the occasional slaughtering of pigs under licence from the Ministry of Food; the licences of all were renewed.

The one knacker's yard in the city has been well conducted and its licence renewed.

During the year 10 fresh licences to slaughter or stun animals were granted by the City Council under the Slaughter of Animals Act, 1933, and 17 licences were renewed. No legal proceedings were necessary under this Act.

The carcases and offal of all animals slaughtered for human consumption were inspected at the time of slaughter by Meat Inspectors stationed at the Abattoirs.

The following table gives an analysis of the animals slaughtered at the two Government slaughter-houses :—

ANIMALS SLAUGHTERED AT GOVERNMENT SLAUGHTER-HOUSES.

	Year	Cattle ex. Cows	Cows	Calves	Sheep	Pigs	Total
Government Slaughter-house No. 1 (Public Abattoir) .. .	1946	16,574	4,312	15,182	66,457	474	102,999
	1947	15,008	4,457	13,226	56,596	364	89,651
Government Slaughter-house No. 2 (Danube Road) .. .	1946	5,958	1,853	3,268	27,447	393	38,919
	1947	5,290	1,458	4,641	23,020	381	34,790

In addition to the above animals, 2,976 horses and two goats were slaughtered at the Public Abattoir for human food.

The following table shows the different species of animals and the number of whole carcases or parts condemned for tuberculosis and other diseases :—

CARCASSES INSPECTED AND CONDEMNED.

	Cattle (excluding cows)	Cows	Calves	Sheep and Lambs	Pigs	Horses
ALL DISEASES EXCEPT TUBERCULOSIS.						
Whole carcases	12	56	69	115	17	24
Carcases of which some part or organ was condemned	4,600	1,543	16	6,039	48	516
Percentage of numbers inspected affected with diseases other than Tuberculosis	22.73	27.03	0.48	7.73	8.72	18.15
TUBERCULOSIS ONLY.						
Whole carcases	60	241	10	1	3	5
Carcases of which some part or organ was condemned	1,439	1,736	9	..	15	..
Percentage of numbers inspected affected with tuberculosis	7.38	33.42	0.11	0.001	2.42	0.17

Meat and other foods condemned as unsound.—The total weight of food destroyed by consent during the year was 771,834 lbs., as compared with 803,354 lbs. in the previous year. About half the total weight condemned comprised carcases or parts of carcases and offal found to be diseased at the time of slaughter. Mention should be made of an appreciable quantity of imported meat which, on being cut up in the butchers' shops, was found to be affected with "bone taint."

Details of foods destroyed are given in the following table :—

MEAT, ETC., DESTROYED BY CONSENT.

	1947.	1946.	1945.	1944.
Beef	212,359 lbs.	171,435 lbs.	231,681 lbs.	263,147 lbs.
Veal	3,483 ..	2,747 ..	2,420 ..	2,098 ..
Mutton	5,999 ..	6,453 ..	5,241 ..	5,363 ..
Pork	2,979 ..	4,111 ..	10,521 ..	10,131 ..
Bacon and Ham	140 ..	103 ..	1,048 ..	3,527 ..
Offals	214,615 ..	196,212 ..	176,468 ..	174,823 ..
Rabbits	1,313 ..	3,365 ..	3,916 ..	5,024 ..
Poultry	1,366 ..	1,447 ..	8,725 ..	692 ..
Game	36 ..	..	..	..
Horse Flesh	20,539 ..	11,035 lbs.	8,240 lbs.	6,060 lbs.
Fish	55,228 ..	40,795 ..	52,313 ..	73,465 ..
Shellfish	39,708 ..	51,493 ..	45,725 ..	21,693 ..
Vegetables	77,029 ..	164,064 ..	314,771 ..	178,167 ..
Fruit	21,583 ..	18,034 ..	91,594 ..	20,303 ..
Tinned goods	75,267 ..	70,004 ..	60,016 ..	51,637 ..
Cheese	180 ..	..	..	..
Edible Fungi .. ..	..	..	24 lbs.	..
Bread and Cereals	10,050 lbs.	23,513 lbs.	18,172 ..	8,577 lbs.
Flour	3,374 ..	..	..	1,268 ..
Biscuits	4,491 ..	..	3,200 lbs.	..
Beans .. ..	..	..	1,210 ..	..
Sundries	12,095 lbs.	38,543 lbs.	7,250 ..	7,902 lbs.
Totals	771,834 lbs.	803,354 lbs.	1,042,535 lbs.	833,877 lbs.
No. of Eggs	80	64	976	80

Shellfish.—During the year six samples were taken of shellfish exposed for sale in the Leeds Wholesale Market and were submitted to the Medical School for bacteriological examination. Three of these were found to contain bacillus coli in such quantity as to render them unfit for human consumption. These batches of polluted mussels were rendered safe by boiling and steps were taken to prevent further batches from the same source arriving in Leeds under threat of condemnation.

Legal Proceedings with regard to slaughtering and illegal slaughtering and Food Inspection.—*Food and Drugs Act, 1938, Section 57.*—Proceedings were taken for slaughtering pigs on unlicensed premises and the defendant was found guilty and fined £1.

Food and Drugs Act, 1938, Section 9 (1) (A).—Proceedings were taken against a firm for selling unsound Cornish Pasties and the defendants were found guilty and fined £5.

MILK SUPPLIES

Dairy Farms, Dairies and Milk Sellers.—The following tables show the number of registered dairy farms, dairies and milk sellers in the city on 31st December, 1947:—

DAIRY FARMS AND COWKEEPERS.

		Dairy Farms	Cow- keepers
No. on register on 31st December, 1946	113	109	
No. added to the register during the year	2	9	
No. removed from the register during the year	2	9	
No. on register on 31st December, 1947	113	109	

DAIRIES AND RETAIL PURVEYORS OF MILK.

		Dairies	Retail Purvey- ors of milk
No. on the register on 31st December, 1946 (including 18 entries in respect of purveyors with premises in the surrounding County Area)	239	214	
No. added to the register during the year	5	10	
No. removed from the register during the year	9	16	
No. on register on 31st December, 1947 (including 19 entries in respect of purveyors with premises in the surrounding County Area)	235	208	

Five applications for the renewal of licences to produce "Accredited" milk were refused by the licensing authority. Three of these applicants appealed to the Ministry of Health against the Corporation's decisions and the Ministry dismissed the appeal in all three cases. There has been an improvement in the samples of other producers' "Accredited" milk taken since.

Proceedings were taken under Section 21(2) of the Food and Drugs Act, 1938, against a milk retailer for selling pasteurised milk without a licence and for using the designation " Pasteurised." The retailer was dismissed under the Probation of Offenders Act.

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATIONS)
REGULATIONS, 1936-1946.

Description of Licences.	Number in force on 31st December		
	1945	1946	1947
To use the designation "Tuberculin Tested"—			
1. To produce and bottle	3	3	2
2. To produce, but not bottle .. ..	..	1	1
3. To sell by retail	17	15	13
4. To bottle and sell	2	2	2
To use the designation "Accredited"—			
1. To produce and bottle	6	5	5
2. To produce, but not bottle	61	61	60
3. To sell by retail	4	4	3
4. To bottle and sell .. ..	..	..	..
To use the designation "Pasteurised"—			
1. Pasteurisers' Licences	4	4	4
2. To sell by retail	11	13	11

Dairy Inspection and Milk Sampling.—The following visits were paid during the year by the Food and Drugs Inspectors and Cowshed and Dairies Inspector :—

To dairies .. .. .. ..	..	1,585
To cowsheds .. .. .. ..	..	1,810
To railway stations .. .. .. ..	..	53
To farms or dairies <i>re</i> infectious disease ..	..	9
To foodshops and bottled milk stores ..	..	233

During the year 2,695 samples of milk were submitted to the Departmental Laboratory for bacteriological examination. The samples were taken from the following grades of milk :—

"Tuberculin Tested" .. .. .. ..	..	65
"Accredited" .. .. .. ..	..	1,455
"Pasteurised" .. .. .. ..	..	273
"Heat Treated" .. .. .. ..	..	45
"Sterilised" .. .. .. ..	..	46
"Ungraded" .. .. .. ..	..	811

Samples were taken at farms and distributing centres; in course of delivery to local institutions; at railway stations and from road vehicles used for the conveyance of milk. The accompanying tables give detailed information of the results of the tests applied.

METHYLENE BLUE (REDUCTION) TEST.

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent- age	No.	Percent- age
*Pasteurised	273	258	94.5	15	5.5
*Sterilised	46	46	100.0	..	..
*Heat Treated	45	39	86.7	6	13.3
†Tuberculin Tested	65	60	92.3	5	7.7
†Accredited	1,455	1,173	80.6	282	19.4
†Ungraded	811	577	71.1	234	28.9

*Satisfactory samples not to decolourise Methylene Blue at 37°C. in 30 minutes.

† Satisfactory samples not to decolourise Methylene Blue at 37°C. in 4½ hours, May to October, or 5½ hours, November to April.

COLIFORM TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent- age	No.	Percent- age
*Pasteurised	273	225	82.4	48	17.6
*Sterilised	46	46	100.0	..	..
*Heat Treated	45	23	51.1	22	48.9
†Tuberculin Tested	65	61	93.8	4	6.2
†Accredited	1,455	1,084	74.5	371	25.5

* *Bacillus Coli* must be absent in 1 tube of 1 m.l. 1/000 dilution of milk for the sample to be regarded as satisfactory.

† *Bacillus Coli* must be absent in 2 out of 3 tubes of 1 m.l. 1/100 dilution of milk for the sample to be regarded as satisfactory.

PHOSPHATASE TEST.

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent- age	No.	Percent- age
Pasteurised	273	267	97·8	6	2·2
Sterilised	46	46	100·0	..	..
Heat Treated	45	44	97·8	1	2·2

Satisfactory samples not to give colour reading of more than 2·3 Lovibond Blue Units.

Biological Test.—During the year 392 samples of milk were submitted to the City Bacteriologist for biological examination for the presence of tubercle bacilli. The results are shown in the following table :—

Designation	Total Samples Taken	Result of Test			
		Positive		Negative	
		No.	Percent- age	No.	Percent- age
Tuberculin Tested	20	..	..	20	100·0
Accredited	126	7	5·6	119	94·4
Pasteurised	14	..	..	14	100·0
Ungraded	232	5	2·2	227	97·8
Total	392	12	3·1	380	96·9

FOOD AND DRUGS

The Sampling Officers took 1,915 formal and 22 informal samples of milk; 258 formal and 68 informal samples of other foods or drinks and 29 formal samples of drugs.

Administrative action was taken in all cases where the samples were found to be adulterated or deficient. If the adulteration or deficiency was a first offence or was slight, a warning letter was sent. More serious cases were dealt with by prosecution, and the results of summonses issued under the Food and Drugs Act, 1938, during the year are shown in the following table :—

SUMMONSES ISSUED DURING 1947, UNDER THE FOOD AND DRUGS ACT, 1938.

No. of Sample	Article.	Adulteration or Deficiency.	Result of Hearing.
28L	Milk	4·0% of added water ..	
30L	Milk	1·5% of added water ..	
31L	Milk	1·5% of added water ..	
32L	Milk	1·3% of added water ..	
33L	Milk	1·8% of added water ..	
162L	Whisky	40·6° under proof, 8·6% excess of water.	Fined £2 and ordered to pay £2 10s. 6d. costs : Producer.
197L	Whiskey	40·0° under proof, 8·7% excess of water	Fined £3 3s. costs.
366L	Milk	20·0% deficient in fat ..	Fined £2 : Producer-Retailer.
441L	Milk	15·0% of added water and 33·3% deficient in fat ..	Fined £2 : Producer-Retailer.
461L	Milk	37·0% deficient in fat ..	Fined 14s. 6d. costs : Producer Retailer.
726L	Milk	4·0% of added water ..	Fined £4 and 14s. costs : Producer.
727L	Milk	2·5% of added water ..	
748L	Milk	6·4% of added water ..	
749L	Milk	5·8% of added water ..	Dismissed under the Probation of Offenders Act on payment of 8s. costs : Retailer.
871L	Milk	8·0% of added water ..	Fined £2 : Producer-Retailer.
977L	Parsley	Contains 10·0% of extraneous material consisting of small stones and grit.	Fined £10 and £1 1s. costs : Wholesalers.
1008L	Milk	4·0% of added water ..	Fined £10 : Retailer.

SUMMONSES ISSUED DURING 1947, UNDER THE FOOD AND
DRUGS ACT, 1938.—continued.

No. of Sample	Article	Adulteration or Deficiency	Result of Hearing
1012L	Milk	3·5% of added water	
1013L	Milk	2·0% of added water	
1014L	Milk	7·5% of added water	
1019L	Milk	3·5% of added water	
1038L	Milk	8·0% of added water	
1039L	Milk	4·5% of added water	
1040L	Milk	7·5% of added water	
1041L	Milk	3·5% of added water	
1048L	Milk	4·5% of added water	
1049L	Milk	3·0% of added water	
261H	Milk	5·5% of added water	
262H	Milk	5·1% of added water	
263H	Milk	5·3% of added water	
264H	Milk	3·8% of added water	
279H	Milk	12·0% of added water	Fined £2 : Producer.
384H	Parsley	20·0% stones and grit, 80·0% of dried parsley	Fined £5 : Wholesaler.
552H	Milk	20·0% deficient in fat	
553H	Milk	20·0% deficient in fat	
602H	Milk	28·0% deficient in fat	Fined £2 : Retailer.
841H	Milk	11·5% of added water	Fined £2 : Retailer.
888H	Milk	10·0% of added water	Fined £2 : Retailer.
932H	Mint	Lacks constituent to which mint owes its smell and flavouring properties, namely, essential oil of spearmint.	Case dismissed against Retailer and Wholesalers.

Fertilisers and Feeding Stuffs Act, 1936.—During the year 14 samples of fertiliser, five formal and nine informal, were taken under the above-mentioned Act and submitted to the Agricultural Analyst for examination. One formal and two informal samples were unsatisfactory.

Rag Flock Acts, 1911 and 1928.—During the year two samples of rag flocks were taken and submitted for analysis; both were reported as satisfactory.

Pharmacy and Poisons Act, 1933 (Part II).—The administrative year for the purpose of the above-mentioned Act is the period 1st May to 30th April. The appended table gives a detailed summary of the work done during the year ended 30th April, 1948.

Persons on the List on 30th April, 1947	275
Persons added to the List during the year	74
Persons removed from the List during the year	12
Persons on the List on 30th April, 1948	337
Premises on the List on 30th April, 1947	412
Premises added to the List during the year	88
Premises removed from the List during the year	18
Premises on the List on 30th April, 1948	482
Visits paid to :—	
1. Listed Premises in connection with new applications	74
2. Listed Premises in connection with unpaid fees	19
3. Listed Premises for routine inspection	597
4. Unlisted Premises	20
Contraventions :—	
Persons found to be selling Part II Poisons on Unlisted Premises	39
Listed Sellers found with incorrectly labelled Part II Poisons in stock	14
Contraventions dealt with :—	
Persons ceasing to sell Part II Poisons from Unlisted Premises	12
Persons selling Part II Poisons from Unlisted Premises who subsequently applied for listing	27
Listed Sellers who have corrected labels found to be not in accordance with requirements as to labelling	14

Pharmacy and Medicines Act, 1941.—No contraventions have come to the notice of the Department during the year.

ICE-CREAM, FOOD PREPARATION AND STORAGE PREMISES

A total of 4,672 visits were paid to premises used for the sale, storage or manufacture and preparation of foodstuffs. During the year effective liaison has been established between the Food Office and the Department with regard to the establishment of new canteens and cafes. It has been arranged that licences for the establishment of these new places should not be granted until the premises have been approved by this Department and any alterations necessary have been made. Many inspections have been made of canteens and food preparing places in factories, and many improvements have been obtained in these places.

Particulars with regard to registration of premises under Section 14 of the Food and Drugs Act, 1938, are set out in the following table :—

REGISTRATION.

Number of premises registered for the manufacture of ice-cream during 1947	5
Number of premises registered for the sale of ice-cream during 1947	66
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale	20
Number of notifications of change of occupier received :— ice-cream premises	8
food preparing places	7
Number of ice-cream premises removed from register ..	3
Number of premises on the register 31st December, 1947 :— (a) used for manufacture for sale of ice-cream	124
(b) used for the sale of ice-cream	525
(c) used for the storage of ice-cream intended for sale	3
(d) used for the manufacture of sausages, or preparation of preserved food	478

It was necessary to serve 80 informal notices in respect of premises contravening the law and, in three instances, statutory notices had to be served.

Five hundred and one routine visits to ice-cream manufacturing premises were made and further progress was achieved in dealing systematically with those found to be unsuitable. Eleven ice-cream manufacturing premises were reported to the Local Authority as being unsuitable for use for the purpose. In three instances the registration of the premises was cancelled after the occupier had appeared before the Committee and in one such case the business was re-established on another site under approved conditions, as shown in the following photographs. In the remaining cases schemes of alteration and improvement were submitted to the Committee and were approved.

Fish Frying Premises.—Eight hundred and seventy visits were paid to registered fish frying premises. Thirteen applicants were granted registration subject to the carrying out of works. In one case the application for registration was refused because the premises were unsuitable and the scheme of improvements which the applicant then submitted was accepted and registration granted, subject to the completion of these works. The improvements that can be effected in connection with the registration of premises under Section 14 of the Food and Drugs Act, 1938, are illustrated by the photographs of the fried fish shop at 18, Chester Place.

Ice-Cream Sampling.—During the year 343 samples of ice-cream were taken from the places of manufacture or from local vendors for bacteriological examination. All the laboratory results were communicated to the ice-cream manufacturers. When the laboratory result showed an unsatisfactory ice-cream, a special follow-up visit was made by the district sanitary inspector to advise on improved methods. Most frequently the cause of bad results has been found to be inadequate cleansing of plant or utensils and inefficient sterilisation.

The results are shown in the following tables :—

METHYLENE BLUE TEST.

Grade	No. of Samples	Percentage	Remarks
1	55	20·8	Good
2	59	22·4	Satisfactory
3	53	20·1	Unsatisfactory
4	97	36·7	Very unsatisfactory

OLD ICE-CREAM MANUFACTORY, WINDSOR SQUARE

Unsuitable by reason of darkness and the lack of sanitary convenience, washing basin, hot water supply, separate store for raw materials and sterilising apparatus.

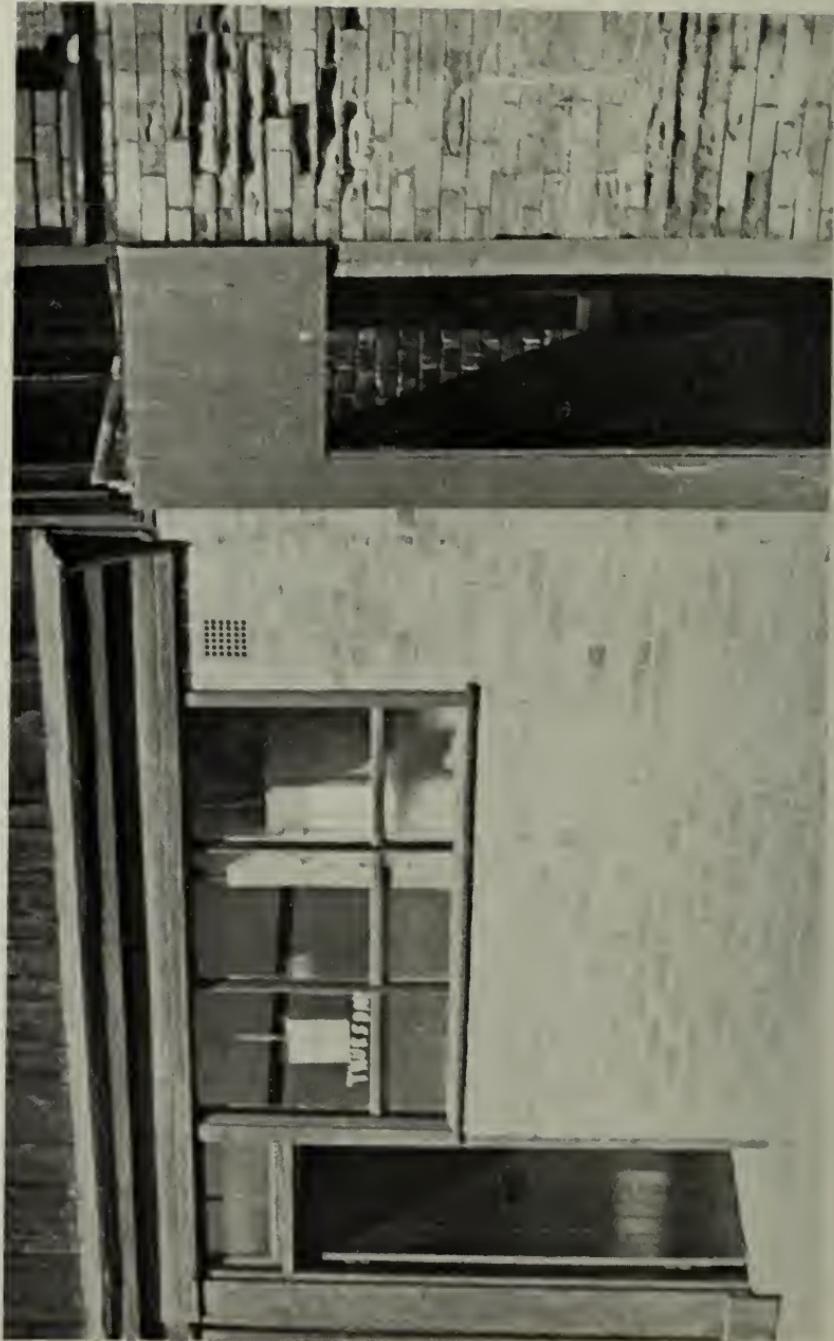


NEW ICE-CREAM MANUFACTORY, 77, EASY ROAD
Showing well lit manufacturing room, lavatory basin with water heater over in staff cloakroom. Washing tanks and steaming chest can be seen in sterilising room beyond



FISH FRYING PREMISES BEFORE REGISTRATION, 18, CHESTER PLACE
Showing dilapidated shop front, preparing room with no proper window, and rotten wooden side wall allowing ingress to rats.





FISH FRYING PREMISES AFTER REGISTRATION, 18, CHESTER PLACE

Showing new brick shop front, white tiled walls of frying room, enlarged fish and potato preparing room now fit from front and ventilated by air brick. Also provided were separate potato store and mechanical extraction ventilation from frying room.

BACTERIAL COUNT.

Organisms per m.l.	No. of samples	Percentage	Remarks
Under 10,000 ..	62	18·1	Good
10,000-100,000	118	34·4	Satisfactory
100,000-1,000,000	142	41·4	Unsatisfactory
Over 1,000,000	21	6·1	Very unsatisfactory

COLIFORM TEST.

Bacillus Coli	No. of samples	Percentage	Remarks
Absent in $\frac{1}{10}$ th m.l. ..	46	13·4	Good
Present in $\frac{1}{10}$ th m.l. ..	157	45·8	Satisfactory
Present in $\frac{1}{100}$ th m.l. ..	48	14·0	Unsatisfactory
Present in $\frac{1}{1000}$ th m.l.	92	26·8	Very unsatisfactory

DISEASES OF ANIMALS

Tuberculosis Order of 1938.—The table hereunder, which shows the number of bovines suspected to be affected with tuberculosis, and the action taken, is compiled from information supplied to the Local Authority by the Ministry of Agriculture and Fisheries.

No. of suspected animals reported or found.	No. affected with tuberculosis and slaughtered.	No. of animals found to be not amenable to the Order.
26	23	3

Swine Fever Order of 1938.—During the year 24 cases of suspected swine fever were received, all of which were investigated by the Veterinary Inspector for or on behalf of the Ministry of Agriculture and Fisheries. None of these cases was confirmed.

Regulation of Movement of Swine Order of 1922.—Under this Order 157 licences for the disposal of 774 pigs from the Whitkirk Auction Mart were issued and 614 visits have been paid to pig keeping premises to ascertain whether the recently removed store pigs were detained and isolated for the appropriate period.

Anthrax Order of 1938.—Two cases of suspected anthrax were reported but were not confirmed.

Animals (Landing from Ireland, Channel Islands and Isle of Man) Order of 1933.—During the year 2,765 Irish cattle were received on direct purchase by the Ministry of Food and 17 Irish store cattle were received at premises in the city.

Foot and Mouth Disease.—An outbreak of this disease occurred at a farm in this city. At the farm there were slaughtered, in all, four beasts and 287 pigs. The beasts' carcases and the carcases of 187 pigs were salvaged and, after examination, passed fit for food. The remaining 100 pigs which were affected with Foot and Mouth Disease were disposed of by burying in a field adjoining the piggeries.

During the outbreak a total of 301 Movement Licences was issued, permitting the movement, under controlled conditions, of 7,987 animals.

Fowl Pest Order, 1936.—During the year this disease was very prevalent in many parts of the country, and, in this city, five suspected cases of Fowl Pest were reported; in one case the outbreak was confirmed by the Ministry of Agriculture's Veterinary Inspector. All domestic poultry on the premises were slaughtered; the carcases of 11 geese, 13 ducks, seven pullets, 33 hens and one cock were disposed of by burning at the Corporation Refuse Disposal Works; the premises were disinfected.

FACTORIES

The total number of inspections of factories was 3,435 and the defects found at these inspections necessitated the service of 547 written notices under the Factories Act, 1937. Examination was made of 541 outworkers' premises.

The following tables show statistics with regard to conditions in factories and to home work :—

INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH (INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS)

Premises	Number on Register	Number of		
		Inspections	Written Notices	Prosecutions
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by the Local Authority .. .	636	290	57	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority .. .	2,967	3,124	490	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out workers' premises) .. .	1	21	..	..
Total .. .	3,604	3,435	547	..

CASES IN WHICH DEFECTS WERE FOUND

Particulars	No. of Cases in which defects were found				No. of cases in which prosecutions were instituted
	Found	Remedied	Referred		
	To H.M. Inspector	By H.M. Inspector			
Want of cleanliness (S. 1) ..	13	11	..	12	..
Overcrowding (S. 2) ..	..	..	..	..	..
Unreasonable temperature (S. 3) ..	..	..	..	..	..
Inadequate ventilation (S. 4) ..	6	6	..	2	..
Ineffective drainage of floors (S. 6) ..	1	1	..	..	..
Sanitary Conveniences (S. 7)—					
Insufficient	40	60	..	7	..
Unsuitable or defective ..	520	513	..	40	..
Not separate for sexes ..	195	227	..	7	..
Other offences against the Act (not including offences relating to Outwork) ..	10	..	10	..	..
Total .. .	785	818	10	68	..

OTHER MATTERS.

	Number of		
	Lists.	Outworkers.	
	C.	W.	
Homework :—			
<i>List of Outworkers (S. 110) :—</i>			
Lists received twice in the year	356	515	1,647
,, once in the year	18	5	11
Addresses of received from other Authorities		153	
outworkers forwarded to other Authorities		182	
Notices to occupiers as to keeping or sending lists		359	
Prosecutions .. .. ..		..
Inspection of Homeworkers' premises		541	
Homework in unwholesome premises :—			
Instances .. .. .. .. ..		..
Notices (S. 111) .. .. .. .. ..		..
Prosecutions .. .. .. .. ..		..
Homework in infected premises :—			
Instances		5	
Orders made } Public Health Act, 1936 (S. 153) .. ..		..
Prosecutions } [Infectious cases—4 measles and 1 scarlet fever.] .. ..		..
Matters notified to H.M. Inspectors of Factories :—			
Failure to affix Abstract of the Factories Act 1937 (S. 128)		10	
Action taken in matters referred by H.M. Inspectors	Notified by H.M. Inspector	68	
	Reports (of action taken) sent to H.M. Inspectors .. ..	..
Total number of factories on Register		3,604	
The above total includes 257 bakehouses.			

Offices and Other Workplaces.—A total of 384 inspections of offices and other workplaces was made during the year. Notices under the Public Health Act, 1936, were served and these resulted in the following defects being remedied :—

Insufficient Ventilation	4
Overcrowding	1
Insufficient or unsuitable sanitary accommodation ..	12

Action was taken under the Public Health Act, 1936, in respect of these defects, 37 preliminary notices and three statutory notices being served.

Shops.—The total number of shops inspected was 628 and action was taken under the Shops Act, 1934, in respect of defects found,

and 71 preliminary notices were served and five statutory notices were issued. The following is a summary of the defects which were remedied :—

Shops ventilated -
Reasonable temperature secured 4
Sufficient conveniences provided 16
Lighting provided 4
Washing facilities provided 7
Meals facilities provided 3
Other defects remedied 36

HOUSING

Number of Houses.—The total number of houses in the city on 31st December, 1947, was 152,708, made up approximately of 58,872 back-to-back and 98,836 through houses.

Empty Houses.—At the year end there were 911 unoccupied houses in the city.

New Houses.—The number of new houses completed during the year was 1,376, of which 645 were permanent and 731 temporary.

Housing Shortage.—The number of applications for houses standing in the registers at the Housing Department on 31st December, 1947, was 22,772.

Overcrowding.—The housing shortage still remains acute and renders impossible anything but the relieving of the most serious cases of overcrowding.

On the Municipal Estates in the city there are 23,085 occupied dwellings and the average percentage of overcrowding during the year was 2·74. From privately-owned houses 234 families living in overcrowded conditions have been rehoused during the year. Of these families, 228 have been accommodated in municipal dwellings and six in requisitioned dwellings.

There have been no applications for licences to permit temporary overcrowding.

During the year sanitary inspectors measured 322 houses in connection with overcrowding and 4,908 rent books were examined to ascertain if the "permitted number" had been inscribed.

The inspectors also surveyed 166 houses to enable owners to be supplied with the "permitted number."

The number of certificates of permitted numbers issued during the year was 275, making a total of 87,981 certificates issued since the Act became operative.

HOUSING ACT, 1936, PART IV.—OVERCROWDING.
January 1st to December 31st, 1947.

Number of cases of overcrowding discovered in houses owned by the Corporation	187
Number of cases of overcrowding in houses owned by the Corporation which have been relieved	133
Number of overcrowding cases relieved during the year in course of slum clearance operation .. .. ..	..
A. (1) No. of dwellings known to be overcrowded at the end of the year ..	2,582
(2) No. of families dwelling therein ..	3,306
(3) No. of persons dwelling therein ..	17,753
B. No. of new cases of overcrowding reported during the year ..	1,081
C. (1) No. of cases of overcrowding relieved during the year ..	641
(2) No. of persons concerned in such cases	4,658
D. Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	24

Verminous Houses.—The disinfection of 343 houses on the municipal housing estates has been carried out during the year by outside contractors on behalf of the Housing Committee in respect of all types of vermin including bed-bugs, cockroaches, silver fish, etc.

Unfit Houses.—During the year 16,596 dwelling-houses were surveyed and examined and 8,184 nuisances and housing defects were remedied.

Houses numbering 4,506 found to be defective in one respect or another under the Public Health Act, 1936, were repaired in response to notices served under this Act.

The number of houses inspected under the Housing Act, 1936, and found not to be in all respects reasonably fit for human habitation was 848; 300 houses were repaired in response to notices served under Section 9.

HOUSING ACT, 1936

Table showing the number of houses examined by the Medical Officer of Health as part of the general survey of the city during the year ended December 31st, 1947, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts, with the corresponding figures for 1945 and 1946.

		1945.	1946.	1947.
Number of new houses erected during the year ..		23	828	1,376
(i) By the Local Authority .. ..		..	440	895
(ii) By other bodies and persons		23	388	481
<i>Inspection of dwelling-houses during the year.</i>				
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made		11,610	12,449	16,596
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925, and the number of inspections made .. ..		..	89	121
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .. ..		..	27	47
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation		676	703	375
<i>Remedy of Defects during the year without Service of Formal Notices.</i>				
Number of defective dwelling-houses rendered fit in consequence of informal action taken by the Local Authority or their Officers		480	601	182
<i>Action under Statutory Powers during the year.</i>				
A.—Proceedings under Section 9 of the Housing Act, 1936.				
(1) Number of dwelling-houses in respect of which notices were served requiring repairs ..		373	385	308
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—				
(a) By owners		224	487	118
(b) By Local Authority in default of owners ..		22	11	7
B.—Proceedings under the Public Health Acts.				
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied ..		10,565	9,507	9,352
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—				
(a) By owners		7,820	1,810	1,585
(b) By Local Authority in default of owners ..		75	57	21
C.—Proceedings under Sections 11 and 12 of the Housing Act, 1936.				
(1) Number of dwelling-houses in respect of which				
(a) Demolition Orders were made ..		..	19	17
(b) Closing Orders were made ..		..	..	1
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders .. ..		..	..	13

When private owners failed to remedy urgent housing defects or serious nuisances after the service of statutory notices, the Department carried out the necessary work as a matter of urgency. Such work in default was carried out to five houses under the Housing Act at a cost of £41 3s. 6d. and to eleven houses under the Public Health Act at a cost of £80 3s. 4d., these amounts being recovered from the owners of the properties concerned.

There has been considerable deterioration in houses situated in Clearance Areas, which would have been demolished but for the war. Some of these houses are now becoming structurally dangerous and must be dealt with individually as a matter of urgency. Action has had to be taken already in some cases and the condition of one of these houses is illustrated by the photograph on following page.

GENERAL SANITATION

Water.—One hundred and sixty nine samples of drinking water were taken by the Department for chemical and bacteriological examination. Six of these were from springs, wells, pumps or supplies other than the Corporation mains supply; of these one was satisfactory and five were of doubtful purity. Appropriate action was taken.

A total of 163 samples was taken at various points in the city mains supply.

The closest collaboration exists between the Health and Waterworks Departments with regard to all water samples taken. Immediate consultation takes place in respect of all samples where doubt exists. During the year an increased number of samples was taken in certain areas as the result of such consultation. This resulted in improvement in all cases where samples were in doubt.

Sewage Disposal.—The Sewerage Engineer has dealt with certain repairs and renewals mentioned in the previous report. There still remains further dilapidations to be made good in the bacteria beds for which the necessary work will be commenced in due course. In the circumstances a reasonably satisfactory effluent has been maintained.

Public Cleansing.—Household refuse collected by the Cleansing Department during 1947 amounted to 137,706 tons, of which 42 per cent. was dealt with by separation and incineration, 7 per cent. by incineration and 51 per cent. by controlled tipping. Refuse dust, after mechanical separation, was sold for agricultural purposes to the weight of 14,893 tons.

No. 7, COUNTY STREET

*Showing dangerous condition of partially collapsed roof—Represented 24th October, 1947;
house demolished and site cleared 22nd December, 1947.*



Nuisances.—The number of complaints made during the year has greatly increased, being 9,706. The total number of houses surveyed and examined in connection with nuisances and housing defects was 16,596. Nuisances abated numbered 8,184.

The number of preliminary notices served for the abatement of nuisances was 7,963 and the number of statutory notices 1,219. Of the latter, 737 were effective and 482 were outstanding at the end of the year. A table analysing the work done by district inspectors in 1947 appears on pages 152 and 154.

Keeping of Animals.—The number of pig-keepers in the city increased to 148. The number of pigs kept was 2,174, being a decrease as compared with the previous year.

Many complaints of alleged nuisance were received and 409 visits of inspection were made to pig stykes; the keeping of poultry and other animals was investigated in 57 cases.

Rat Suppression.—During the year 4,415 inspections were made in connection with rat infestations and it was necessary to serve 34 notices under the Rats and Mice (Destruction) Act, 1919. The number of rats caught, killed or poisoned was 4,676; premises cleared of rats numbered 41, and 19 buildings were rendered rat-proof.

The costs of the services of the four rat-catchers employed by the Department, together with the costs of rat-proofing premises, are recovered from the occupier where neglect has caused the infestation. The total amount of money collected in this connection during the year amounted to £383 6s. 3d.

Closet Accommodation.—One privy and three cesspools were abolished. The position with regard to the various types of sanitary conveniences in the city at the end of the year was as follows:—

Privies	145
Pail Closets	138
Trough Closets	50
Cistern Water Closets (approximately) ..	181,256

A large number of preliminary notices was served on owners of property in connection with closet accommodation and in 199 cases statutory notices had to be served. In the owner's default, the water closets appurtenant to seven houses were repaired at a total cost of £12 8s. 8d. and this amount was recovered from the owners concerned.

Ashpits and Dustbins.—Forty-seven ashpits were abolished, one of these being of the sunken type. The Corporation approved grants in aid amounting to £102 5s. 4d. in connection with the abolition of 37 of these ashpits and the provision of 61 dustbins in lieu.

Removal of Offensive or Noxious Matters.—Contraventions of the bye-laws relating to the removal of offensive or noxious matters occurred in 41 cases and were dealt with.

Offensive Trades.—The number of premises in the city where offensive trades are carried on is 114. During the year 133 visits of inspection were made.

Liaison has been established between this Department and the Town Planning Section of the City Engineer's Department and, at their request, many inspections have been made to ascertain whether various trades carried on in the city were such as should be dealt with as Special Industries and zoned into a special area of the city

Repair of Houses.—*Housing Act, 1936, Section 9.*—The number of preliminary notices served during the year for the abatement of housing defects was 375 and the number of statutory notices was 282. The number of houses at which housing defects were remedied and which were rendered fit for human habitation under this Section of the Act amounted to 305; in five cases works of repair were carried out in default at a cost of £41 3s. 6d. which was recovered from the owners.

Thirteen certificates and two reports were issued under the Rent and Mortgage Interest Restrictions Acts, 1920 to 1939, in respect of houses not in a reasonable state of repair.

Common Lodging Houses.—During the year 537 routine visits of inspection were made to common lodging houses.

One additional common lodging house at 34, Villiers Terrace, with 22 beds (for women) was opened during the year, which makes a total at the end of the year of nine registered common lodging houses.

Houses-let-in-lodgings.—The total number of visits paid to houses of this type was 315. Informal action was taken in four cases, while 14 statutory notices had to be served.

Cellar Dwellings and Underground Sleeping Rooms.—During the year 60 visits were paid to underground sleeping rooms.

Tents and Vans.—Vigilance was exercised to ensure that no unauthorised land was used as a camping ground and 1,373 visits of inspection were made to tents, vans or sheds.

Canal Boats.—The number of canal boats on the register at the end of the year was 124; periodical visits of inspection were made to wharves and locks and a complete inspection was made of 156 boats.

Vermin Infestation.—The number of inspections of dwelling-houses in connection with vermin infestation was 518. Council houses found to be bed-bug infested numbered 126 and privately-owned houses found to be infested numbered 240. Arising out of these infestations the number of dwellings disinfested was 290.

Public Conveniences.—Repairs to the six principal conveniences with attendants were carried out to a total cost of £164 3s. 11d. The cost of repairs carried out to the unattended conveniences amounted to £433 4s. 8d., of which nearly a third was expenditure in connection with repairs necessitated by wilful damage.

Public Sewers.—During the year 171 public sewers, affecting 629 houses or other premises, were cleansed at a cost to the Department of £397 10s. 8d. Works of repair or maintenance were carried out to 27 defective public sewers, affecting 159 houses or other premises, and the cost of this work, amounting to £281 18s. 2d. was recovered from the owners of the premises served by the sewers.

Drains.—It was necessary to carry out 898 drain tests, 818 of these being in connection with complaints of nuisances and 80 in respect of new drains relaid in place of those found defective. A large number of preliminary notices were served on owners of property for drainage repairs and in 457 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936. The drains or other appliances of 15 houses were repaired or renewed by this Department in default as a matter of urgency at a cost of £110 1s. 8d., which was recovered from the owners concerned.

The drain flushing service was continued and the income derived from private flushing amounted to £85 15s. 6d.

Smoke Abatement.—A total of 193 formal smoke emission records were taken, grit deposits being recorded in 49 cases. Where infringements of the Smoke Abatement Bye-laws were found, warning was given by the inspector in each case. In 109 cases of technical difficulty the Supervisory Inspector carried out survey and examination of the boiler plant for the purpose of advising with regard to the abatement of smoke nuisances.

Informal notices calling for the abatement of smoke nuisances were served in two cases, but statutory notices had to be served in six cases.

Soot fall and sulphur pollution records were continued and are preserved for future publication.

Infirm and Diseased Persons.—The number of cases of infirm and diseased persons living under insanitary conditions drawn to the attention of the Department showed a decrease. During the year 27 visits were paid to such cases. In many instances improvements were effected in the state of cleanliness of the premises and in the arrangements for the care and welfare of the aged persons. The voluntary removal of infirm and diseased persons who were unable to devote to themselves proper care and attention was achieved in three instances by persuasion. It was not necessary to apply to the Court for an Order for compulsory removal in any case.

Articles exchanged for Rags.—During the year one person was prosecuted for an offence against the provisions of Section 154 of the Public Health Act, 1936 ; the offender was fined £5.

Insect Pests.—A large number of complaints of nuisance were received in respect of insect pests other than bed-bugs, which have been dealt with under the subject of vermin. In one case black maggots found crawling across a kitchen floor proved to be the larvæ of the lesser house fly (*Fannia Canicularis*) which had hatched from eggs laid in pigeons' droppings at the chimney top and had crawled down the flue. Several complaints were received of fly nuisance caused by *Anisopsis Fenistralis* which has been found to be breeding freely on the bacteria beds at Knostrop Sewage Works ; in this connection there has been collaboration with the Sewage Works Manager in regard to preventive measures. There have been many complaints of " bugs " which proved, on investigation, to be the Golden Spider Beetle (*Niptus Hololeucus*) ;



MOSQUITO CONTROL
Sanitary Inspectors examining Mosquito larvae.

this niptus beetle, originally a resident of Asia, and, until recently, very rare, is now becoming quite common. Experimental work was done at St. James's Hospital to try to find a method of combating the nuisance from red ants (*Monamorium Pharoensis*) and it was found that spraying with Gammexane LO44 proved most effective. Potential mosquito breeding places were examined and, where mosquito larvæ were found, advice was given as to the best remedial measures. The photograph on the opposite page illustrates this work and shows sanitary inspectors examining mosquito larvæ found in a pond.

Mortuary Accommodation.—The number of bodies received into Marsh Lane Mortuary during the year was 538, comprising 523 admitted from streets, private houses, workshops, etc., two as the result of accidents on the railways, 10 from street accidents and three unclaimed bodies. The number received in the previous year was 486.

WORK DONE BY SANITARY INSPECTORS, 1947.

ANALYSIS OF INSPECTIONS	EASTERN DIVISION	WESTERN DIVISION	FACTORIES SHOPS, Etc.	CITY TOTALS
DWELLINGS.				
Houses recorded under Housing Regs.:-				
1. (a) fit in all respects	16	105	..	121
2. (b) unfit and capable of repair	143	658	..	801
3. (c) unfit and incapable of repair	4	43	..	47
4. (d) underground dwellings	18	42	..	60
5. Houses for drainage	2,430	2,886	..	5,316
6. Houses for ashes accommodation	237	767	..	1,004
7. Houses for closet accommodation	1,151	1,711	..	2,862
8. Houses for complaint and defects	4,289	5,416	1	9,706
9. Houses for infectious diseases	108	160	2	270
10. Houses for overcrowding	105	217	..	322
11. Houses for filthy conditions	62	77	..	139
12. Houses for verminous conditions	191	328	..	519
13. Housing re-inspections	6,683	6,951	..	13,634
14. Houses let in lodgings	210	16	..	226
15. Separate dwellings within houses let in lodgings	63	26	..	89
16. Common lodging houses	318	219	..	537
17. Canal boats	94	62	..	156
18. Sites for tents, vans, sheds, etc.	42	166	..	208
19. Tents, vans or sheds	339	1,034	..	1,373
20. Visits for enquiry	1,666	2,598	1	4,265
FOOD PREMISES.				
21. Ice-cream	321	173	7	501
22. Fried Fish	402	468	..	870
23. Pickles and sauces	7	9	19	35
24. Sausages and pork products	67	39	33	139
25. Other registered premises	66	29	1	99
26. Bakehouses	502	366	34	902
27. Butchers	35	30	6	71
28. Provision merchants	33	17	13	63
29. Restaurants, cafes, kitchens	12	6	..	..
30. Other food premises	54	144	1,483	1,501
31. Visits for enquiry	137	53	36	234
32. Rat infestations	1,510	301	120	1,931
45. Farms	383	18	..	401
46. Stables	311	26	..	337
47. Pig Stytes	310	99	..	409
48. Poultry and other animals	30	27	..	57
49. Water supply	151	41	..	192
50. Infirm and diseased persons	20	7	..	27
51. Watercourses, ditches	94	11	1	106
52. Culverts	3	3	..	6
53. Other nuisances	240	111	2	353
54. Public conveniences	554	607	281	1,442
55. Visits for enquiry	392	63	33	488
56. No access visits	1,879	1,672	163	3,714
57. Other visits (not included above)	472	684	150	1,306

WORK DONE BY SANITARY INSPECTORS, 1947.—contd.

ANALYSIS OF WORK DONE	EASTERN DIVISION	WESTERN DIVISION	FACTORIES SHOPS, Etc.	CITY TOTALS
DWELLING REPAIRS AND IMPROVEMENTS.				
58. Roofs, valley gutters, flashings, etc. . .	897	1,120	..	2,017
59. Chimney stacks, flues, pots, etc. . .	119	193	..	312
60. Eaves spouts .. .	769	735	..	1,504
61. Fallpipes .. .	351	305	..	656
62. Walls, brickwork, pointing . .	90	200	..	290
63. Damp-proof courses provided . .	..	10	..	10
64. Dampness otherwise remedied . .	9	53	..	62
65. Wallplaster .. .	45	168	..	213
66. Ceilings .. .	24	67	..	91
67. Floors .. .	24	43	..	67
68. Windows, frames, cords, etc. . .	81	137	..	218
69. Doors, door-frames .. .	19	28	..	47
70. Ovens, fire-ranges, grates, etc. . .	64	115	..	179
71. Washing boilers, setpots, etc. . .	17	29	..	46
72. Sinks, lavatory basins, etc. . .	67	130	..	197
73. Waste pipes .. .	124	154	..	278
74. Water supply provided . .	12	17	..	29
75. Food stores .. .	..	..	..	..
76. Pavings, yards and passages . .	22	30	..	52
77. Repairs to water closets . .	522	693	..	1,215
78. New water closets provided . .	51	24	..	75
79. New pail closets provided . .	..	..	..	..
80. Trough closets abolished . .	..	..	..	..
81. Privy closets abolished . .	..	..	..	..
82. Pail closets abolished . .	..	..	..	..
83. Dustbins provided .. .	28	96	..	124
84. Ashpits repaired .. .	3	9	..	12
85. Sunken ashpits abolished .. .	1	..	..	1
86. Other ashpits abolished .. .	1	8	..	9
87. Other repairs to houses . .	227	167	..	394
88. Verminous houses disinfested . .	11	27	..	38
89. Dirty houses cleansed . .	21	5	..	26
90. Closets cleansed or limewashed . .	11	10	..	21
91. Underground dwellings made fit or closed . .	1	..	..	1
92. Other improvements to common lodging-houses . .	..	6	..	6
93. Other improvements to houses let in lodgings . .	3	..	..	3
94. Improvements to canal boats . .	..	..	..	..
95. Improvements to caravan sites . .	..	..	..	..
FOOD PREMISES.				
96. Walls, ceilings, floors, etc., repaired . .	10	20	15	45
97. Walls, ceilings, floors, etc., cleansed . .	16	23	45	84
98. Ventilation provided or improved .. .	3	14	1	18
99. Articles, apparatus, clothing cleansed . .	4	5	..	9
100. Washing facilities provided .. .	2	11	5	18
101. Washing facilities maintained .. .	2	4	..	6
102. Other improvements .. .	24	28	9	61
TRADES AND BUSINESSES.				
FACTORIES.				
103. Rooms cleansed .. .	..	..	11	11
104. Rooms ventilated .. .	..	..	6	6
105. Reasonable temperature secured .. .	..	..	..	..
106. Overcrowding abated .. .	..	..	..	..
107. Floors drained .. .	..	..	1	1
108. Insufficient conveniences remedied .. .	..	..	60	60
109. Unsuitable/defective conveniences remedied .. .	..	..	513	513
110. Conveniences made separate for sexes .. .	..	..	227	227
111. Other offences remedied .. .	..	..	441	441
112. Absence of abstract noted .. .	..	..	10	10
WORKPLACES.				
113. Rooms ventilated .. .	..	..	4	4
114. Overcrowding abated .. .	..	..	1	1
115. Rooms cleansed .. .	..	..	..	..
116. Sufficient conveniences provided .. .	..	..	12	12

WORK DONE BY SANITARY INSPECTORS, 1947.—contd.

ANALYSIS OF WORK DONE	EASTERN DIVISION	WESTERN DIVISION	FACTORIES SHOPS, ETC.	CITY TOTALS
TRADES AND BUSINESSES (Continued)				
SHOPS.				
117. Ventilated .....	..	..	..	..
118. Reasonable temperature secured .....	..	..	4	4
119. Sufficient conveniences provided .....	..	..	16	16
120. Lighting provided .....	..	..	4	4
121. Washing facilities provided .....	..	..	7	7
122. Meals facilities provided .....	..	..	3	3
123. Other defects remedied .....	..	3	33	36
OFFENSIVE TRADES.				
124. Byelaw offences remedied .....	..	2	..	2
125. Other improvements secured .....	..	2	..	2
SMOKE ABATEMENT.				
126. Furnaces newly provided .....	..	..	..	..
127. Furnaces altered, repaired or renewed	4	..	9	13
128. Chimneys newly erected .....	..	..	..	..
129. Chimneys extended or improved	1	..	..	1
130. Firms adopting smokeless fuel .....	..	..	..	..
GENERAL.				
131. Rats caught, killed or poisoned	492	109	256	848
132. Premises cleared of rats	24	11	6	41
133. Premises rendered rat-proof	17	1	1	19
134. Farm improvements	1	1	..	2
135. Watercourses cleansed	1	1	1	3
136. Culverts cleansed or maintained	2	..	1	3
137. Poultry-house improvements	1	..	..	1
138. Pig-sty improvements .....	..	..	..	..
139. Offensive matter removed	25	9	17	51
140. Manure removed	3	1	..	4
141. Manure-steads built or repaired .....	..	..	..	..
142. Public convenience repairs and painting	37	27	13	77
143. Other nuisances abated	56	4	10	70
DRAINAGE.				
144. Drains repaired	55	71	35	161
145. Drains relaid	23	29	37	89
146. New drains laid	7	7	12	26
147. Drains cleansed	387	300	62	749
148. Public sewers maintained	12	12	3	27
149. Public sewers cleansed	64	98	9	171
150. Ball and water tests	15	24	41	80
151. Other tests	299	434	85	818
152. Gullies renewed or provided	27	17	33	77
153. Soilpipes and ventilating pipes	31	18	8	57
154. Inspection Chambers	7	7	25	39
155. Cesspools repaired or provided .....	..	2	..	2
156. Cesspools emptied	2	2	..	4
157. Cesspools abolished .....	..	2	..	2

HEALTH EDUCATION AND PROPAGANDA

BY

J. F. WARIN, M.D., Ch.B., D.P.H.

Deputy Medical Officer of Health.

The Public Health Committee, as in previous years, delegated its responsibility for Health Education to the Leeds Committee for Social Hygiene and Health Publicity.

The Health Education Centre opened by the Lord Mayor of Leeds, Councillor Sir George Martin, K.B.E., J.P., on 10th January, 1947, and open daily except Sundays and Mondays until the end of June, was the main pre-occupation of the Committee during the year. The premises, which were centrally situated, comprised a ground floor room with extensive shop window space for display purposes, and a basement cinema capable of seating fifty persons. The premises fulfilled basic requirements, namely a room for staging a display, adequate window space to attract the attention of passers-by and a room for cinema shows, but the layout was not ideal. The display room was not large enough to allow the public to move around freely and separate doors for entry and exit would have been an advantage. The window area fronted partly on the main street and partly on a side street and it had been hoped to make full use of all this window space. In practice very few members of the public ever glanced at the side windows and it would have been better to concentrate the displays entirely in the main window. During the six months, twelve separate fortnightly displays were organised covering a wide range of important health topics.

The displays varied a great deal, but those which attracted most attention were the models rather than the charts, posters, photographs, etc. The most successful display was that devoted to "Nursing," consisting of a life-size model of an operating theatre with modern operating table and instrument trolley; patient, surgeon, anæsthetist with apparatus, nurses, blood transfusion in progress, etc. This display also included a patient in an iron lung

and a tracheotomy case. During the eight days devoted to this subject the Centre was attended by over 8,000 persons and was literally crowded out. The next most successful display was "Your Teeth," and here again models and dental apparatus were set out in a very attractive way. It was soon realised how important it was to have a striking display in the main window to compel the attention of the passer-by and so stimulate his curiosity that he would come inside to see the remainder of the show which should, of course, be worth coming in to see. Once a few people were attracted inside, others soon followed. Films relating to each particular display were shown in the cinema at approximately hourly intervals, each programme lasting about forty minutes. The Central Office of Information supplied the cinematograph apparatus, a technician and many of the films, all free of charge. A full-time supervisor was appointed and each organisation responsible for displays provided volunteers to help to staff the Centre. The hours of opening were originally from 1-9 p.m., but it was soon found that the best attendance was between 12 noon and 5 p.m., the attendance in the evening being very small. The times of opening were accordingly altered to 10.30 a.m. to 6 p.m. on Tuesdays, Thursdays and Saturdays, and 12 noon to 8.30 p.m. on Wednesdays and Fridays. The following methods of publicising the Centre were used—display bills on trams and buses, posters, leaflets, cinema slides, press articles and a franking machine slogan. Full particulars of the Centre were sent to all general medical practitioners in the city, to all Clergy and to the Managements of a number of the larger industrial establishments in the city. Communications describing the Centre were also sent to the University, to Youth Organisations and through the Director of Education to all schools. However, the merit of the Centre itself had the greatest influence.

The cost of the Centre was £885, made up as follows:—adaptation of premises £366, publicity £65, running costs £451, miscellaneous expenses £3.

The Centre attracted considerable attention not only in the city but also throughout neighbouring districts. Altogether the Centre was visited by 24,999 people, or an average of 208 per day. Very many more stopped to look at the window displays and

probably learnt something useful. The cinema shows were attended by 6,726 people or an average of 56 per day. The actual detail of the attendances at each display is set out in the following table :

Title of Display	Organisation Responsible	Attendance	
		Display	Film Show
Healthy Babies ..	Leeds Babies Welcome Association ..	1,886	836
Healthy Homes ..	Public Health Dept., Sanitary Section	992	387
Prevent Tuberculosis	Public Health Dept., Health Clinic ..	1,316	652
Exercise and Health	Central Council of Recreational Physical Training	1,436	773
Prevent V.D. ..	Venereal Diseases Dept., Leeds General Infirmary	488	228
Healthy Children ..	School Medical Department	1,471	860
Prevent Infection ..	Public Health Dept., Infectious Diseases Section	528	207
Food and Health ..	Ministry of Food, Divisional Office ..	603	248
Your Teeth	School of Dentistry and Army Dental Corps	4,877	801
Nursing	Public Health Dept., Hospitals Sect. ..	8,528	847
Your Eyes	Blind Welfare Dept. and Northern Counties Association for the Blind	1,296	373
Mental Health ..	Mental Health Services Department ..	1,569	514

It is difficult to estimate the success of a health education experiment of this nature. Attendance figures can only be a guide, the true value being the volume of useful information disseminated directly or indirectly throughout the community. For instance, a mother or teacher may ultimately, as a result of a visit to the Centre, improve the health and welfare of a whole family or school. The Committee had no doubt that the Centre had been most successful and the pioneer experiment well justified.

In addition to the Health Education Centre assistance was given to the large nursing recruiting exhibition held in the Town Hall in July and also to the municipal services exhibition held in connection with the Silver Lining Week. A considerable quantity of suitable exhibition material has now been collected and will be available for future exhibitions on health subjects.

The closest co-operation has been maintained with the Central Council for Health Education although the absence of an Area Representative has handicapped local propaganda work.

Arrangements have been made to distribute the Health Education Journal, which is published quarterly by the Central Council for Health Education, to all members of the Health and Education Committees as well as to members of the Leeds Committee for Social Hygiene and Health Publicity. Two members of the latter committee attended the Summer School organised by the Central Council for Health Education in Oxford during August.

With regard to national propaganda, communications were received either from the Central Council for Health Education or the Ministry of Health in relation to films, posters, leaflets, etc., and wherever possible and appropriate the opportunity was taken of linking up a local effort with the national campaign.

A number of lectures have been given by members of the staff of the Public Health Department on a variety of general health subjects. In addition lectures on sex education have been arranged by the Central Council for Health Education. The Leeds Marriage Guidance Council have experimented with a course of lectures on Preparation for Marriage and as this was successful it is hoped to arrange further courses.

Towards the end of the year the important subject of Health Education in the schools of the city was discussed by the Social Hygiene and Health Publicity Committee. It was generally felt that as far as the girls were concerned instruction was adequate, but that older boys should be offered instruction on lines somewhat similar to the mothercraft course provided for the senior girls.

Other important subjects discussed during the year were the wrapping of bread and washing facilities at public conveniences.

Notice was received of meetings and conferences arranged by the British Social Hygiene Council and arrangements were made for delegates to attend wherever possible.

STAFF CHANGES

W. Santon Gilmour, O.B.E., M.B., Ch.B., resumed duties as Medical Superintendent, Killingbeck Sanatorium, January, 1947.

G. R. Baxter, M.D., B.Ch.D., D.P.H., D.T.M. and H., appointed Assistant Medical Officer for Immunisation, March, 1947.

E. C. Benn, M.B., Ch.B., D.P.H., resumed duties as Medical Superintendent, Seacroft Infectious Diseases Hospital, April, 1947.

Hester E. de C. Woodcock, M.B., Ch.B., D.P.H., Senior Resident Medical Officer, Seacroft Hospital, re-designated Deputy Medical Superintendent, Seacroft Hospital, April, 1947.

H. Rawnsley, L.D.S.U., appointed Assistant Dental Officer for Maternity and Child Welfare and Tuberculosis, May, 1947.

J. Johnstone Jervis, M.D., D.P.H., Medical Officer of Health, resigned July, 1947.

I. G. Davies, M.D., B.S., M.R.C.P., M.R.C.S., D.P.H., appointed Medical Officer of Health and School Medical Officer, July, 1947, in succession to J. Johnstone Jervis, M.D., D.P.H.

J. Aspin, M.A., M.D., D.M.R.D., Assistant Medical Director, Mass Radiography Unit, appointed Deputy Clinical Tuberculosis Officer, July, 1947.

W. Guthrie, M.B., Ch.B., L.M.S.S.A., Assistant Clinical Tuberculosis Officer, resigned August, 1947.

Brigid E. Walsh, M.B., Ch.B., appointed Medical Director, Mass Radiography Unit, November, 1947.

MINISTRY OF HEALTH TABLES.

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1947 AND PREVIOUS YEARS.

YEAR,	Population estimated to Middle of each Year.	Births.		TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.				
		Nett.		Number.		Rate.		Of Non-residents registered in the District.		Under 1 Year of Age.		
		Uncorrected Number.	5	4	6	7	8	9	10	11	12	13
1931	486,400	7,557	7,219	14.8	6,810	14.0	553	249	552	76	6,506	13.4
1932	484,900	7,368	7,004	14.4	6,771	14.0	550	248	617	88	6,469	13.3
1933	485,000	7,070	6,643	13.7	6,851	14.1	538	261	537	81	6,574	13.6
1934	486,250	7,691	7,190	14.8	6,666	13.7	619	244	513	71	6,291	12.9
1935	487,200	7,751	7,211	14.8	6,763	13.9	576	245	463	64	6,432	13.2
1936	489,800	7,845	7,340	15.0	7,003	14.3	620	283	476	65	6,666	13.6
1937	491,860†	7,844	7,279	14.8	6,915	14.1	656	314	491	67	6,573	13.4
1938	494,000	8,159	7,614	15.4	6,592	13.3	597	260	490	64	6,255	12.7
1939	(a) 497,000 (b) 488,000	7,434	7,079	14.2	6,821	14.0	619	333	401	57	6,535	13.4
1940	465,700	7,459	6,946	14.9	7,178	15.4	638	378	395	57	6,918	14.9
1941	471,930	7,027	6,667	14.1	6,610	14.0	655	501	407	61	6,456	13.7
1942	462,400	7,355	7,204	15.6	6,256	13.5	589	423	369	51	6,090	13.2
1943	453,900	7,830	7,547	16.6	6,532	14.4	595	421	356	47	6,358	14.0
1944	451,100	8,611	8,518	18.9	6,314	14.0	601	411	429	50	6,124	13.6
1945	451,670	8,258	7,760	17.2	6,580	14.6	595	425	438	56	6,410	14.2
1946	481,570	10,267	9,886	20.5	6,795	14.1	570	389	401	41	6,614	13.7
1947	492,140	11,304	10,875	22.1	6,982	14.2	567	378	552	51	6,793	13.8

Area of District in acres (land and inland water)

Total population at all ages at the 1931 Census 482,809

† Population adjusted to allow for change in boundary during the year.
The mid-year population after the change is 491,880.

APPENDIX 2.

**TABLE II. CASES OF INFECTIOUS DISEASES ORIGINALLY NOTIFIED BEFORE ALTERATION OF DIAGNOSIS
DURING THE CALENDAR YEAR 1947.**

Notifiable Disease.	At Ages—Years.												Total Cases removed to Hospital.						
	NUMBER OF CASES NOTIFIED.																		
	At all Ages.		Under 1.		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Small-pox	
Cholera (C.)	
Pneumonia (P.)	
Diphtheria (including Membranous Croup)	63	57	4	4	20	14	27	17	8	13	4	8	1	1	..	..	63	57
Erysipelas	45	54	..	..	..	..	..	..	1	9	25	25	11	16	14	22	
Scarlet Fever..	617	807	2	3	166	169	381	511	35	82	29	33	4	7	2	238	
Measles	3,380	173	169	2,022	1,938	1,149	1,204	17	62	19	22	1	..	101	72
Whooping Cough	620	700	77	91	373	450	166	149	2	6	2	4	..	49	49
Typhus Fever	6	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	3	..	..	..	..	..	..	..	..	..	..	..	3	
Relapsing Fever (R.)	4	
Continued Fever (C.)	
Puerperal Pyrexia	
Cerebro-Spinal Meningitis	23	20	5	4	7	6	6	6	2	..	2	3	1	1	..	19	
Poliomyelitis	45	40	1	1	10	3	18	16	6	13	7	3	..	..	37	28	
Polio Encephalitis	1	2	..	..	..	..	..	..	1	..	..	..	..	1	
Ophthalmia Neonatorum	21	13	21	..	..	..	..	..	..	..	..	..	..	5	
Encephalitis Letargica	
Malaria	
Dysentery	11	5	..	2	..	2	..	2	..	2	..	..	8	
Other Diseases	199	296	129	68	40	35	21	19	3	..	..	..	3	
Pulmonary Tuberculosis	298 (27)	220 (15)	..	1	4	8	6 (1)	10 (1)	53 (7)	76 (5)	123 (15)	90 (8)	93 (3)	296
Other forms of Tuberculosis	60 (1)	73 (2)	1	2	20	14	20	16 (2)	5 (1)	13	12	17	205	
Pneumonia (Acute Primary)	173	112	11	11	19	24	10	9	8	5	52	46	19	
" (Acute Influenza)	12	7	..	..	1	..	..	1	..	6	3	2	23	
TOTALS	5,572	5,900	424	367	2,685	2,661	1,806	1,960	142	386	275	372	181	102	59	1,046	
																	52	1,175	

The figures shown in brackets are "Transfer" Cases and are included in totals.

APPENDIX 2—*continued.*

TABLE II A. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE CALENDAR YEAR 1947.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.												Total Cases removed to Hospital.					
	At all Ages.						At Ages—Years.											
	Under 1.		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.					
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera (C.)	Plague (P.) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup)	23	28	2	3	4	12	11	3	6	3	4	1	1	..	..	..	23
Erysipelas ..	43	49	..	..	..	..	..	..	..	1	8	12	24	22	11	14	28
Scarlet Fever ..	602	770	2	163	157	373	497	30	77	30	29	4	7	1	1	1	17	
Measles ..	3,385	3,406	172	168	2,026	1,948	1,150	1,205	18	62	19	22	..	1	..	..	106
Whooping Cough ..	612	639	76	93	367	447	165	149	2	6	2	4	..	..	..	..	41
Typhus Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever ..	..	1	4	..	..	..	..	..	1	..	2	1	..	..	..	..	1
Relapsing Fever (R.) Continued Fever (C.) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Pyrexia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Meningitis ..	..	..	11	6	3	1	1	2	5	..	2	..	3	..	..	..	7
Poliomyelitis ..	..	..	31	22	1	..	7	2	13	10	6	4	..	..	..	..	23
Polio Encephalitis ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	2
Ophthalmia Neonatorum ..	..	..	21	13	21	..	..	..	..	..	..	..	..	..	..	..	5
Encephalitis Lethargica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery ..	..	..	..	9	4	..	2	..	1	1	2	4	1	..	..	..	6
Other Diseases ..	..	..	289	335	135	74	72	55	51	50	13	95	10	103	7	13	5
Pulmonary Tuberculosis	298 (27)	220 (15)	..	1	4	8	6 (1)	10 (1)	53 (7)	76 (5)	123 (15)	90 (8)	93 (3)	27 (1)	19 (1)	395
Other forms of Tuberculosis ..	..	..	60 (1)	73 (2)	1	2	20	14	20	16 (2)	5 (1)	13	12	17	2	10	8
Pneumonia (Acute Primary) ..	..	..	174	112	11	11	19	24	10	9	8	53	22	46	19	27	23
" (Acute Influenza) ..	..	..	12	7	..	1	..	..	1	..	..	6	3	4	2	1	..
Totals ..	..	..	5,572	5,900	424	367	2,685	2,661	1,806	1,060	142	386	275	372	181	102	59
																	1,046	
																	1,175	

The figures shown in brackets are "Transfer in" cases and are included in totals.

APPENDIX 3.

TABLE II A. (*continued*).

NOTIFIABLE DISEASE.		TOTAL ACCEPTED CASES (AFTER CORRECTION OF DIAGNOSIS) IN EACH LOCALITY, (e.g., Parish or Ward) of the District.																										
City.	Parish.	MILL HILL and South.	Westfield.	Blenheim.	Woodhouse.	Central.	North.	Park.	Hyde Park.	Heathcote.	Burmanntofts.	Potternewton.	Roumhay.	Cross Gates and Temple Newsam.	Richmond Hill.	Osmondthorpe.	East Hullslet.	Hunslet Carr and Middleton.	West Hullslet.	Beefton.	Holbeck (South).	Holbeck (North).	Armitage and New Worrley.	Upper Armitage.	Bramley.	Feebley and New Worrley.	City.	
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera (C) Plague (P) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Group) ..	4	4	4	6	..	..	10	1	..	4	..	1	3	..	..	..	3	2	3	..	..	2	1	1	2	51	
Erysipelas ..	..	1	3	5	..	..	8	1	5	4	4	1	3	8	1	9	2	13	2	3	..	2	1	3	5	92	
Scarlet Fever ..	..	32	18	15	28	12	43	50	21	68	39	78	60	103	102	26	86	71	126	41	53	30	25	54	43	1,372	
Measles ..	..	158	70	197	293	124	335	219	114	289	216	355	230	462	339	126	247	309	622	346	171	257	167	323	184	306	6,791
Whooping Cough	30	44	70	56	35	53	50	29	99	32	45	61	79	54	21	33	88	123	70	66	47	15	25	17	49	20	1,311
Typhus Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever ..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
Relapsing fever (R) Continued	fever (C) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Pyrexia	1	2	2	..	2	..	1	..	40	2	..	1	3	2	1	1	..	2	28	1	..	91
Cerebro-Spinal Meningitis ..	..	1	1	1	..	1	1	1	..	1	1	2	..	1	..	..	1	..	..	1	..	..	1	3	..	..	17
Polyomyelitis ..	..	1	1	1	..	1	3	9	2	3	2	1	1	5	3	1	2	1	..	2	..	3	2	..	2	2	53
Polio Encephalitis ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Ophthalmia Neonatorum ..	..	1	1	1	..	1	..	3	1	..	1	2	..	1	1	..	3	3	..	..	..	4	..	..	1	..	34
Encephalitis Lethargica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Dysentery ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
Other Diseases	65	19	57	64	7	8	13	14	15	52	26	21	31	38	14	30	19	47	16	22	10	9	32	27	14	14	684
Pulmonary Tuberculosis ..	8(2)	13(1)	30(3)	19(3)	19(1)	22(1)	26(3)	15(1)	20(2)	41(3)	16(2)	34(3)	33(3)	19(1)	17(1)	15(2)	24(1)	18(1)	21(2)	13	5	17	518(42)
Other Forms of Tuberculosis ..	2	6	9	3	4	7	3(1)	3	6(1)	2	4	5	9	14	8(1)	6	5	5	3	5	..	6	2	7	..	5	133(3)	
Pneumonia (Acute primary) ..	10	4	10	8	7	7	5	3	13	3	9	10	10	37	7	15	13	18	16	4	10	8	19	8	13	286		
Do. (Acute Influenza)	1	2	..	1	..	..	1	..	..	1	..	2	..	1	..	1	1	..	..	..	..	1	2	..	1	19	
Totals ..	315	185	400	486	210	494	397	208	520	414	569	407	742	633	233	453	527	989	517	351	381	232	489	335	530	465	11,472	

The figures shown in brackets are "Transfer in" Cases and are included in totals.

